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Understanding the Impact of Social Location and English as a Second Language on Service
Needs and Outcomes of Intimate Partner Violence Victims

A Dissertation Presented in
Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

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Abstract

Victims of intimate partner violence have various needs due to abuse (e.g. safety, housing, gaining employment). Domestic violence programs play a crucial role in helping victims address their complex needs through services such as advocacy, legal support, counseling, and immediate housing. In an effort to better understand diverse victims' needs and help-attained in domestic violence program settings, a study was conducted of 464 female victims across 15 domestic violence services agencies throughout a major Midwestern metropolitan area. Victims completed surveys six months after beginning services. The current study examined victims' profiles across various needs upon their entry to services to determine if there is an association with perceived outcomes six months after beginning services. In the current study, we also explored whether social location (i.e., interaction between race/ethnicity and socioeconomic status) and English as a second language were associated with victims' 1) profiles of needs upon beginning services, and 2) perceived outcomes six months after beginning services. Cluster analysis was used to identify five profiles of victims' needs: High Needs, Benefits/Low Needs, Economic Needs, Legal Needs, and Mental Health Needs. Victims' membership in the Legal Needs Cluster vs. Benefits/Low Needs Cluster predicted higher Safety Outcomes of victims. English as a second language and social location of victims significantly predicted cluster membership. Victims whose primary language was not English had higher odds of membership in High Needs cluster than victims whose primary language was English. Related to social location, Latina victims who graduated high school or completed some college had higher odds of membership in High Needs, Economic Needs, Legal Needs, and Mental Health Needs clusters than White victims who graduated college or completed some higher education. Victims' social location also significantly predicted victims' outcomes for Coping with Domestic

Violence, Financial Independence, and Safety. Domestic violence programs and service providers working directly with victims of IPV must consider the intersectionality of victims' race/ethnicity and socioeconomic status (i.e., social location) and whether their primary language is English to appropriately address victims' unique needs. Implications for future research, practice, and policy for IPV victim services are discussed.

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Literature Review

Intimate Partner Violence

Intimate partner violence (IPV), otherwise known as domestic abuse, describes “physical violence, sexual violence, stalking and psychological aggression (including coercive acts) by a current or former intimate partner” (Breiding, Basile, Smith, Black, & Mahendra; Centers for Disease Control and Prevention [CDC], 2015). An intimate partner (e.g., spouse, boyfriend, dating partner, or ongoing sexual partner) may be characterized by some but not all of the following dimensions: emotional connectedness, regular contact, ongoing physical and sexual contact, identifying as a couple, and/or knowledge of each other’s lives (Breiding et al., 2015). Further, an intimate partner may engage in the following coercive behaviors: physical violence, such as pushing, punching, or use of a weapon; sexual violence, such as use of physical force to compel a person to engage in sexual act against her will or abusive sexual contact; stalking, such as repeated and unwanted phone calls or spying with a listening device, camera, or global positioning system (GPS); and psychological aggression, such as humiliation, isolation, denying victim access to basic resources (Breiding et al., 2015; Saltzmann et al., 2002). Additionally, researchers have recognized economic abuse as a unique form of intimate partner violence, in which an intimate partner makes or attempts to make a victim financially dependent by maintaining control over economic resources (e.g. by preventing employment, limiting funds, interfering with educational goals etc.; Adams, Sullivan, Bybee & Greeson, 2008; Fawole, 2008). Finally, it is understood that intimate partner violence occurs across the lifespan, suggesting a victim of intimate partner violence may experience anywhere from one episode to chronic episodes of violence in their life (Langen & Innes, 1986).

Prevalence of IPV. The prevalence of intimate partner violence makes it an important social issue to address. The National Intimate Partner and Sexual Violence Survey (NISVS) is a national study that was conducted to gather data on the experiences of intimate partner violence of men and women throughout the United States; a total of over 12,000 interviews were completed with English and Spanish speaking men and women in 2010 (Breiding, Smith, Basile, Walters, Chen, & Merrick; [NISVS], 2011). Prior to the NISVS, there was no established tool for ongoing investigation of national and state level IPV data, which makes it one of the strongest sources of data on the current scope of IPV in the US. Though intimate partner violence is perpetrated against men and women, it is more often perpetrated against women (Breiding, Chen, & Black, 2014; Tjaden & Thoennes, 2000)¹. The NISVS study found 1 in 3 women (35.6%) had experienced physical violence, rape, or stalking by an intimate partner in their lifetime (Black et al., 2011). Nearly half of the women who participated in the survey (47.1%) reported at least one act of psychological aggression by an intimate partner during their lifetime (Breiding et al., [NISVS]; 2011). One in five women (22.3%) experienced severe physical violence by an intimate partner, such as being hit with something hard, being kicked or beaten, or being burned on purpose. This translates into an estimated 29 million women who have experienced severe physical violence in the U.S. (Breiding et al., [NISVS]; 2011). Respectively, a meta-analysis on the prevalence of physical intimate partner violence in English-speaking nations (including the U.S.), found that one in four adult women (23.1 %) experience intimate partner violence in their lifetime (Desmarais, Reeves, Nicholls, Telford, & Fiebert,

¹ As such, victims of intimate partner violence will be referred to as women throughout this document. In no way does this diminish the experiences of male or LGBTQ victims of violence.

2012)². Of those women who reported experiencing some form of intimate partner violence, strikingly close to 71% first experienced violence before the age of 25 (Breiding et al., [NISVS]; 2011). Although understanding general prevalence of intimate partner violence of women in the US highlights the severity of this social issue, it is also important to consider how sociocultural factors impact the prevalence of IPV.

Prevalence of IPV by Race/Ethnicity. Previously, researchers have explored the relationship between victims' race and ethnicity and their experiences with intimate partner violence. Studies have produced inconsistent findings as to whether a woman's race and ethnicity is associated with their risk of being victimized by intimate partner violence (Bachman & Saltzman, 1995; U.S. Department of Justice, 1998). When controlling for variables such as age, income, employment, and attitudes towards violence, one study found no difference in IPV prevalence across race among a national sample of 1,970 families (Kantor et al., 1994). On the other hand, other more recent national studies have found racial differences in prevalence. For instance, another national study in the U.S., the National Violence Against Women Survey (NVAW), found nonwhite women (25.5%) were significantly more likely to report having experienced IPV than their white counterparts (21.3%; Tjaden & Thoennes, 2000). In this study, American Indian/Alaska Native women reported significantly higher rates of intimate partner violence than did women of other racial backgrounds (i.e., African-American, Mixed Race, Hispanic), and Asian/Pacific Islander women reported significantly lower rates compared to the same racial ethnic groups (Tjaden & Thoennes, 2000). Specifically, an estimated 30.7% of American Indian/Alaska Native women, 27% of multiracial women, 26.3% of non-Hispanic

² Most of the studies (85.5%) were conducted in the United States. Analyses across studies displayed variability in rates, suggesting the need for standardized measurement of IPV.

black women, 21.3 % of non-Hispanic white women, 21.2% of Hispanic women, and 12.8% of Asian Pacific Island women experienced physical violence by an intimate partner during their lifetimes. Comparing national prevalence rates among different racial ethnic groups between the NVAW and the NSIVS study conducted over a decade later (Breiding et al., 2011), the order in which racial ethnic groups reported experiencing physical violence in their lifetime remained the same, but the overall prevalence of experiencing intimate partner violence across all racial ethnic groups increased. In the NSIVS survey conducted in 2010, an estimated 51.7% of American Indian/Alaska Native women, 51.3% of multiracial women, 41.2% of non-Hispanic black women, 30.5% of non-Hispanic white women, 29.7% of Hispanic women, and 15.3% of Asian or Pacific Islander women experienced physical violence by an intimate partner during their lifetimes. Most recently, a national study using the Collaborative Psychiatric Epidemiology Survey (CPES), examined racial differences in the prevalence of IPV in the US among 2,316 women who were married or cohabiting. The findings were consistent with former studies, suggesting blacks were victimized by IPV the most (13.3 %), followed by Whites (12.6%), Latinas (9.6%), and then Asians (8.5%; Cho, 2012). While studies reveal differences in prevalence of IPV across races and ethnicities, and some studies include immigrant victims of Asian and Latina descent in their study samples (e.g. Hazen & Soriano, 2007; Raj & Silverman, 2003), there is limited data of prevalence estimates of IPV across immigrant or refugee communities (Runner, Novick, & Yoshihama, 2009). Based on Runner and colleagues (2009), IPV is not more prevalent among immigrant/refugee victims compared to non-immigrant/refugee victims. However, these researchers also report there are important methodological issues to consider when studying the prevalence of IPV among immigrant/refugee communities, such as exclusion of immigrant/refugee populations when data is collected for non-English speaking

individuals (Runner et al., 2009). Dissimilar prevalence rates across studies may be also be due to conceptual differences, such as how IPV is measured, and methodological differences, such as which factors are controlled for between studies. Racial differences within reports of IPV may be explained by victims' fear of disclosure (Montalvo-Liendo, 2009) or be influenced by collectivistic thinking (i.e., value placed on the family instead of the individual). These factors may discourage a victim from seeking help outside of the family and allow experiences to go unreported (Lee, 2002). On the other hand, the differences in victimization among various groups may also be explained by other social, cultural and contextual factors, such as a victim's socioeconomic status.

Prevalence of IPV by SES. Intimate partner violence occurs among all social classes, but past research has shown a relationship between low socioeconomic status (SES) and the prevalence of intimate partner violence (Field & Caetano, 2004; Gelles, 1997; Kessler, Molnar, Feurer, & Appelbaum, 2001; Sorenson, Upchurch, & Shen, 1996). According to Cunradi, Caetano, and Schafer (2002), when the role of income, education, and employment was examined in a national sample of 1,635 White, Black, and Hispanic couples from the National Alcohol Survey (NAS), lower socioeconomic status was associated with an increased risk of intimate partner violence. Specifically, annual household income was found to have the greatest association on the prevalence of intimate partner violence. This was especially significant among black couples (Cunradi et al., 2002). Consistent with previous research, a national study found financially secure people were less likely to be victimized by IPV than those who were not financially secure (Cho, 2012). In this study, financial security was assessed by asking women if they have more money or just enough money for their needs (financially secure) compared to not having enough money to meet their needs (financially not secure). Conversely, other variables

that are indicators of SES in the same study, such as employment and education, did not show effects on IPV prevalence (Cho, 2012). The inverse relationship between SES and IPV may be better understood through social structural theory, which proposes that IPV is associated with the social structural conditions (e.g., poverty, limited education, increased unemployment) that characterize the lives of a group of people (Gelles, 1993). Abusers may also target women who have fewer resources and are therefore more vulnerable to their control and likely to become dependent on a relationship for resources in the first place (Kalumuss & Straus, 1984).

In addition to understanding how SES may impact the occurrence of IPV, it is also important to consider how IPV, specifically economic abuse, impacts the SES of victims. As mentioned earlier, economic abuse is unique form of IPV, in which an abusive partner creates economic problems by attempting to control a victim's ability to acquire, use, and maintain economic resources (Adams et al., 2008; Postmus, Plummer, McMahon, Murshid, & Mi Sung Kim, 2012). Consequently, economic problems that abusers create for victims of IPV may impact women's SES by negatively influencing their finances, education, and employment opportunities (Adams, Greeson, Tolman, & Kennedy, 2013; Adams et al., 2008; VonDeLinde, 2002). For example, an abuser may interfere with the woman's ability to retrieve financial aid through her schooling as a form of further control of her economic funds (Brewster, 2003) or excessively call on the phone or appear unannounced at her work place to compromise her job (Lloyd, 1997; Wettersten et. al., 2004). Women report having attained less work experience, job skills, and job training because of their experiences of IPV (VonDeLinde, 2002). Together, we see there is a bidirectional relationship between IPV and SES, suggesting women's SES may influence risk of IPV victimization, and specific forms of IPV may negatively influence victims' SES.

Victims' Needs

Studies suggest that victims of intimate partner violence are likely to have a collection of needs, such as legal support, employment, child care, and housing (Allen, Bybee, & Sullivan, 2004; Schechter, 1999; Sullivan & Rumpitz, 1995). Housing, both short-term and permanent, becomes a need for many victims of intimate partner violence because they are often forced to leave their homes in order to seek safety from their abusers (Baker, Cook, & Norris, 2003). Historically, victims have reported challenges gaining access to public housing or even attempting to rent housing after leaving an abusive partner (VonDeLinde, 2002). Victims may also have legal needs to help them pursue safety from abusers, such as obtaining a divorce from the abuser, requesting child support, getting an order of protection, or even managing immigration status (Dutton, Orloff, & Hass, 2000). It is also not uncommon for many abusers to control financial resources to make victims dependent on their abusers (Postmus et al., 2012). For example, an abuser may deny access to money to acquire basic needs, such as food and clothing (Anderson et al., 2003). With limited access to basic resources when leaving (or considering leaving) an abusive partner, victims may need support applying for governmental aids, such as TANF or food stamps.

In addition to affecting victims' access to basic needs, abusers may also interfere with their partner's ability to maintain childcare, access transportation, and sustain employment (Adams et al., 2008; Barusch & Taylor, 1999; Moe & Bell, 2004; Postmus et al., 2012; Swanberg, Logan, & Macke, 2005; Wettersten et al., 2004). In some studies, women report that abusers sabotage their cars, threaten and physically restrain them, fail to take care of their children, steal the car keys, and refuse to give them a ride to prevent their partners from going to work (Riger, Ahrens, & Blickenstaff, 1999; VonDeLinde, 2002). Ultimately, research reveals

that abuse may cause women to lose their jobs either because they were fired or were forced to quit because of intimate partner violence (Riger, Ahrens, & Blickenstaff, 2000; Shepard & Pence, 1988). These studies suggest victims of intimate partner violence may have needs related to accessing transportation, acquiring childcare, and entering or reentering the work force based on their experiences with an abusive partner.

Furthermore, studies demonstrate several examples of how abusers control their partners' financial resources. For example, an abuser may run up debt in the victim's name or purposefully ruin her credit score while misinforming her or concealing information from her in the process (Brewster, 2003; VonDeLinde, 2002). An abusive partner may even steal a victim's credit cards or force the victim to take out loans for him (Boyce et al., 2014). In one exploratory study, 79% of women who had participated in a financial literacy program for victims reported their abusers controlled, used, and compromised the maintenance of their financial resources (Postmus et al., 2012). These findings highlight experiences of IPV may create financial problems, and in turn, create financial needs for victims.

In addition to understanding victims' financial needs, victims form needs pertaining to their physical and psychological well-being. Self-report studies show that IPV victimization is associated with poorer ratings of physical and psychological health outcomes (Bonomi, Anderson, Rivara, & Thompson, 2007; Bonomi et al., 2006; Brokaw et al., 2002; Campbell et al., 2002; Coker et al., 2002, WHO, 2013). Specifically, studies suggest repeated physical assaults can increase the risk for chronic diseases; neurological, cardiopulmonary, and gastrointestinal symptoms; and create adverse reproductive health outcomes (Bonomi et al., 2006; Coker et al., 2002; Janssen et al., 2003). Physical violence can also directly manifest as soft tissue injuries, facial fractures, broken bones and concussions (Cascardi, Langhinrichsen, &

Vivian, 1992; Le, Dierks, Ueeck, Homer, & Potter, 2001). These negative physical outcomes can lead victims to have greater needs from the health care system. In addition to the physical problems that victims experience, IPV also leads to psychological problems (Golding, 1999; Martin et al., 2008). A meta-analysis of 56 studies of female victims of intimate partner violence found that the weighted mean prevalence of mental health problems was 64% in studies of posttraumatic stress disorder, 48% in studies of depression, 19% in studies of alcohol abuse, 18% in studies of suicidality, and 9% in studies of drug abuse (Golding, 1999). These findings show victims have needs related to managing their mental health too. In order to address psychological needs, victims may find individual and family therapies or substance abuse treatment programs helpful.

Interestingly, Allen and colleagues (2004) examined profiles of victims' needs. They used cluster analysis to identify five clusters, representing profiles of victims' remaining needs six months after receiving services. The five clusters represented victims focused on housing, victims focused on education and employment, victims focused on legal needs, and two clusters categorized by high endorsement and low endorsement across all needs that were assessed (Allen, Bybee, & Sullivan, 2004). However, Allen and colleagues (2004) did not explore the differences in cluster membership based on victims' race/ethnicity or socioeconomic status.

Diverse victims' needs. Many studies have explored victims' needs based on race/ethnicity and socioeconomic status related to IPV services (e.g. mental health, legal support, social services; Lyon, Lane, & Mendard, 2008; Rodríguez, Valentine, Son, Muhammad, 2009; Eisenman et al., 2009; Wilson, Silberberg, Brown, & Yaggy, 2007; Wong et al., 2007). However, few studies have compared diverse groups to one another to understand differences in needs based on victims' racial and ethnic background, or immigration/refugee status. Victims

from minority groups have service needs common to other IPV victims, but they also have unique needs (Runner et al., 2009). For instance, immigrants may face language barriers, such as translating and filing documents to gain governmental support and resources, or not being able to speak with a provider when requiring other services post victimization (Runner et al., 2009; Moe, 2007; Orloff, Jang, & Klein, 1995). Compared to U.S. born, English-speaking victims, immigrant/refugee victims may also have more needs related to understanding social systems and their legal rights in the U.S., possibly fearing deportation or separation from their children (Runner et al., 2009). In addition, immigrant/refugee victims may have economic and social needs that are influenced by their cultural beliefs, such as the man holds absolute power, and the woman is not expected to work (Runner et al., 2009). Yoshioka and Choi (2005) also argue the importance of considering cultural differences that impact victims' needs as they may be associated with their perceptions of gender and marital roles. Specifically, needs may differ for victims because of the value they place on their own needs (i.e., individualism) compared to the needs of their family or community (i.e., collectivism). Some victims may want access to services to help them leave their abusive relationships, but that is not necessarily the hope for all victims, particularly those victims whose values do not align with divorce, living independently, or being single parents.

Some studies also show empirical evidence of racial differences in needs. Systemic racism and discrimination may create additional needs for women of color who have experienced IPV. In one exploratory study of white and black rural women who sought services in domestic violence shelters, white rural women had more needs related to building social support systems compared to black rural women who came into shelter with stronger, existing social support systems (Few, 2005). In another larger study across eight states, data were collected from 3,410

residents from 215 domestic violence shelters. Findings indicated significant differences in their needs based on race/ethnicity and education (Lyon et al., 2008). For instance, Blacks wanted the most help with finding affordable housing (89%), paying attention to their own wants and needs (79%), and budgeting or handling money (68%) compared to Whites and Hispanics.

Furthermore, Hispanics and Blacks reported greater need for understanding domestic violence (74%) and need for education/school for themselves (56%) compared to White victims.

Additionally, Hispanics reported a greater need for TANF benefits (38%), abuse-related injuries (42%), and immigration issues (30%) compared to Whites and Blacks.

The same study also examined differences in needs based on education. Victims with advanced degrees were less likely to need help with finding affordable housing, education/schooling for themselves, TANF welfare benefits, and job or job training compared to other educational groups. Victims with less than an 8th grade education had significantly greater needs related to making connections to other people who can help, education/schooling for themselves, TANF welfare benefits, abuse related injuries, job or job training, and health issues compared to the other educational groups (i.e., 9th-11th grade, High School, Some College, College Grad, Advanced Degrees). These findings highlight victims' needs may vary based on their racial ethnic identities and education. Ultimately, examining victims' needs help us understand how to foster victims' safety.

Victims' Safety

Many victims lack resources and do not have the ability to meet their needs independent from the abuser. This is a primary reason why a victim will stay with an abusive partner or return to them (Gondolf, 1988; Hoefeller, 1982; Strube and Barbour, 1983; Sullivan, 1991). Staying with or returning to an abusive partner may leave a victim at risk of further abuse. Although

leaving a relationship with an abusive partner cannot guarantee safety, addressing victims' needs to promote their independence (e.g. physically, financially) from an abusive partner may increase their sense of safety if they wish to leave the relationship. Research indicates IPV victims report various reasons why they do not leave their partners or return to them (Anderson et al., 2003; Harding & Helweg-Larsen, 2009). From a sample of 485 victims who received help from a domestic violence advocacy center, lack of money (45.9%), not having a place to go (28.5%), and not having police help (13.5%) were just some of the reasons why victims returned to their abusive partners, preventing them from being safe (Anderson et al., 2003). In another study of victims in domestic violence shelters, researchers found half of the victim participants reported they returned to their abusive relationships because they did not have a place to stay, increasing their chances of being re-victimized (Harding & Helweg-Larsen, 2009).

Although there are many barriers to victims leaving an abusive relationship, studies also reveal that resources, such as day care, housing, education, and job training could be protective factors that promote victims' independence from their abusive partners and increase their sense of safety (Postmus, Severson, Berry, Yoo, 2009; Bybee & Sullivan, 2005). In addition, research has determined increasing victims' knowledge of safety planning and community resources leads to their increased safety over time (Bybee & Sullivan, 2002). Ditcher and Rhodes (2011) explored how to increase women's sense of safety after experiencing IPV victimization by examining a sample of 173 victims who had reported violence to the police. Victims completed self-report questionnaires about what services they need and what services would help them feel safer in their abusive relationships. Over half of the sample (53%) reported employment assistance would help them to feel safer, 67% reported housing assistance would help them feel safer, and 64% reported financial assistance would help them feel safer (Ditcher & Rhodes,

2011). Victims also identified medical care assistance (76.9%), including mental health services (63%) would help them feel safer. Specifically, victims endorsed nontraditional services (e.g., economic assistance, mental health assistance) would help them feel safer compared to relatively lower interests in traditional IPV services (e.g. shelter service; Ditcher & Rhodes, 2011).

Victims' perceptions of what will make them feel safer versus what actually increases their safety may differ. For instance, Panchanadeswaran and McCloskey (2007) compared victims of severe violence who received shelter services versus those who did not, finding that victims who received shelter service left their abusive relationships sooner than those who did not receive shelter services. To better understand how to address victims' needs and increase their sense of safety, the following section further elaborates on services available for IPV victims.

IPV Services

Victims of IPV can turn to domestic violence programs to help meet their needs and reduce their risk of revictimization. Domestic violence programs are distinctive human service agencies because they provide safety, protection, and trauma services that other types of providers typically do not offer to IPV victims (Tower, McMurray, Rowe, & Wallis, 2006).

Victims will most often seek services from a domestic violence program when there is a need to manage or escape violence (Macy, Nurius, Kernic, & Holt, 2005). Domestic violence programs may differ based on service philosophies and grassroots origins (Pfouts & Renz, 1981).

Moreover, programs can differ in size, capacity, and the services provided. However, the common goals of these programs are similar: justice, autonomy, restoration, and safety (Sullivan, 2011).

Domestic violence programs commonly include emergency shelter, counseling, crisis hotlines, and advocacy. To help victims escape violence, provide temporary housing, and offer

advocacy, short-term counseling services, and support, shelters are commonly utilized (Sullivan & Gillum, 2001). To help victims recover from traumatic events, rebuild self-esteem, and improve quality of life, counseling services are used (Sullivan & Bybee, 1999). Furthermore, counseling services can help victims address the impact of violence, rebuild feelings of self-efficacy, and engage in safety planning. Support groups are a key component of counseling services as well (Bennett et al., 2004), though these services may not always be available. Telephone crisis hotlines are another way victims of IPV can seek support, as these services typically operate 24 hours a day, 7 days a week. Crisis hotlines provide a safe outlet for victims to call in and discover resources and information from providers about how to address specific issues (e.g. childcare, housing; Bennett et al., 2004). Finally, advocacy services generally support victims as they navigate through community systems (e.g. legal, medical, and social). Often times, advocates are the agents that link victims to other stakeholders in the community who can address their needs the advocates of a domestic violence program possibly cannot resolve (e.g. police, attorneys, and public housing agents; Bennett et al., 2004). Ultimately, advocates connect their clients to people who can provide access to the resources they need to increase their sense of safety after experiencing intimate partner violence. To the degree advocates, and more generally, domestic violence programs, provide the most appropriate responses to victims may depend on the delivery approach of such services.

Researchers have highlighted the need to reexamine policies related to delivering services to address victims' complex needs. More specifically, there has been emphasis on the importance of providing individualized, flexible services to victims because of the significant differences in their needs (Goodman et al., 2016; Goodman & Epstein, 2005). Allen, Bybee, and Sullivan (2004) concluded that it is critical to approach providing services to victims in an individualized,

comprehensive way because this delivery approach has proven more effective in helping victims meet their needs compared to women who did not receive services in such a manner. Although these services are available, not all victims will utilize them.

Victims' Formal Help-Seeking

The current section will focus on victims' help-seeking from formal responders. Formal responders (e.g., advocates, legal staff, counselors) are professionals who provide support and tangible resources to victims of IPV to meet their needs. Victims' help-seeking in the context of intimate partner violence theoretically involve three processes: 1) defining the problem, 2) deciding to seek help, and 3) selecting a source of support (Liang, Goodman, Tummala-Narra & Weintraub, 2005). Victims may or may not seek help from formal responders for a variety of reasons. Liang and colleagues (2005) identify individual, interpersonal, and sociocultural factors that may influence victims to seek help. Some examples of factors that may influence help-seeking include: victims' comparing their experiences to others' experiences of victimization (i.e., individual), presence and absence of social supports (i.e., interpersonal), and intersectionality of victims' identities (e.g., gender, class; i.e., sociocultural; Liang et al., 2005). Additionally, help-seeking amongst victims will generally happen on more than one occasion over time (Cattaneo et al., 2007). IPV victims are likely to engage in help-seeking multiple times because they may identify new problems through the course of their help-seeking process that requires selecting additional sources of support. For example, a victim may initially seek help from a legal service provider to receive an order of protection against her abusive partner, but after being separated from her partner, the victim may decide to also seek help from a counseling service provider to better cope with her traumatic experiences. This example demonstrates how IPV victims may seek help from different types of formal responders on more than one occasion.

Studies that have examined victims' help seeking from formal responders suggest that different factors may lead women to seek help (Berk, Berk, Newtown, & Loseke, 1984; Ferraro, 1987; Postmus et al., 2009). For instance, a victim is more likely to seek help when her experience of violence is severe (Coker, Derrick, Lumpkin, Aldrich, & Oldendick, 2000; Goodman et al., 2003). Other researchers have found that victims who do engage in help-seeking from formal responders (e.g., social services, psychological services) may be driven by their specific needs, such as welfare benefits and housing (Postmus et al., 2009). A review of formal services that IPV victims most frequently seek help from include (but are not limited to) domestic violence shelters, women's support groups, professional counseling, and other social services (Gordon, 1996; Postmus et al., 2009). Coker and colleagues (2000) assessed the help-seeking of victims in one southeastern state, finding over half of the victims (53%) sought community-based or professional services for IPV. More specifically, 45.5% of the women in that sample reported help-seeking from mental health counselors, 16.4% reported help-seeking from support groups, and 10.9% reported help-seeking from domestic violence shelter staff (Coker et al., 2000). Collectively, studies indicate different rates of help-seeking of formal counseling services, ranging between 14.9% (Henning & Klesges, 2002) and 50% (Coker et al., 2000; Gondolf, 1998). In addition to counseling services, one of the other major services provided to IPV victims includes shelter services. Grossman, Lundy, George, and Crabtree-Nelson (2010) analyzed a random sample of women who sought help from one of 70 shelter services in the state of Illinois between 1998 and 2005.³ Grossman and colleagues' (2010) determined 28,945 individuals sought shelter services over the six-year timespan, highlighting

³ The data from the current study used the same data base system as the data from Grossman and colleagues' (2010) study.

how critical shelter services are for victims of IPV. While important to understand what formal services victims of IPV seek help from in a general context, for the purposes of the current study, it is also important to highlight research exploring differences in formal help-seeking based on victims' diverse backgrounds.

Diverse Victims' Formal Help Seeking. Some studies suggest there are differences in victims' help-seeking based on diverse backgrounds (Dutton et al., 2000, El-Khoury et al., 2004; Lipsky, Caetano, Field, & Larkin, 2006). However, there is limited research examining diverse victims' formal help-seeking specific to domestic violence service programs. For instance, Postmus and colleagues (2009) identified common barriers to seeking formal services, including victims' fear of stigma around receiving services and victims perceiving support systems previously unhelpful and therefore unwilling to return for help. However, researchers in that particular study did not explore differences based on the diverse backgrounds of victims, although systemic discrimination may have impacted diverse victims' formal help seeking experiences. According to Gondolf, Fisher, and McFerron's (1988) examination of racial differences among 5,708 victims seeking shelter services across 50 shelters in one southern state, little variability was found in help-seeking among White, Black, and Hispanic women. Women from all three racial groups sought about the same amount of help, but it was noted that Hispanic women were least likely to contact social services compared to Black and White women (Gondolf et al., 1988). In another study comparing Latinos and non-Latinos across 12,039 households, findings suggested Latinos sought help from shelters less frequently compared to non-Latinos (Ingram, 2007). Ingram (2007) identifies differences in help-seeking between Latinos and non-Latinos may be better explained by language barriers and women's lack of familiarity with services. Furthermore, women's immigration status, which victims may fear will

lead to their deportation has been reported as factor that influences help-seeking among Latinos (Dutton et al., 2000; Rizo & Macy, 2011). Liang and colleagues (2005) also propose victims' cultural backgrounds may influence whether victims seek help from IPV services. For example, a victim's cultural background reinforced by her gender role beliefs may prevent a woman from help-seeking in an effort to maintain the integrity of her family unit (Liang et al., 2005).

In addition to understanding victims' help-seeking based on racial and ethnic differences, studies also indicate variability in help-seeking based on socioeconomic factors (Coker et al., 2002; Cattaneo & DeLoveh, 2008). Considering one indicator of SES (i.e. education), researchers explored help-seeking behaviors of 313 women who experienced IPV and identified women with higher education levels were more likely to seek IPV services (Coker et al., 2002). Though it has been a common assumption in the literature that women who have greater resources will be better able to seek help (Bograd, 1999), Cattaneo and DeLoveh (2008) use a national sample of over one thousand women to examine the role of SES (i.e., education and income) in help-seeking from various domestic violence services. The researchers did not find support for the assumption that lower income women are less likely to report help-seeking. In fact, the results suggested women with lower income were more likely to report having used both shelter and police services; women with higher income were less likely to seek shelter services. Furthermore, SES did not play a significant role in women's use of hotline services (Cattaneo & DeLoveh, 2008). Although Coker and colleagues (2002) identified women's education did play a role in help-seeking, Cattaneo and DeLoveh (2008) did not indicate education played a significant impact on help-seeking of specific services, including hotline services and shelter services. In addition to exploring victims' help-seeking from IPV services, it is also important to

understand whether the formal services utilized by victims are effective. Therefore, the following section will focus on research regarding the effectiveness of services for IPV victims.

Effectiveness of IPV Services

Domestic violence service programs have been designed to improve emotional well-being, increase knowledge and skills, change attitudes and expectations, and in some instances, change life-circumstances of IPV victims (Sullivan, 2011). However, the effectiveness of domestic violence service programs can be difficult to assess for various reasons. One reason it can be challenging to measure service effectiveness is because domestic violence programs will often use flexible approaches with their clients to provide individualized, comprehensive services, but this approach can make it difficult to keep track of what services are utilized and reported helpful. Although victims report utilization of many services (e.g. psychological, legal), the formal services they find most helpful relate to addressing tangible needs, such as childcare, housing, food, education, and job training (Postmus et al., 2009). Historically, victims of IPV have reported crisis hotlines, women's groups, social workers, and psychotherapists are also among the most helpful for addressing aspects of IPV (Gordon, 1996). In a statewide evaluation of 54 domestic violence programs, victims reported having positive experiences when using community-based counseling, hotline services, shelter services, and advocacy services (Bennet, Riger, Schewe, Howard, & Wasco, 2004).

Studies not only reveal victims tend to be satisfied with services, but that they are also positively impacted by the domestic violence services they receive. Tutty and colleagues (1993) found women's support groups demonstrated an increase in victims' self-esteem, sense of belonging, and locus of control. In a more recent study, engaging in support groups was also associated with reduction in psychological distress symptoms and increased feelings of social

support compared to women who did not receive the support group intervention (Constantino, Kim, & Crane, 2005). Sullivan and Bybee (1999) found victims' participation in community-based advocacy services was related to receiving greater social support, experiencing fewer depressive symptoms, having higher quality of life, and experiencing less challenges accessing community resources compared to victims who did not receive the same advocacy services (Bybee & Sullivan, 2005). Researchers have also demonstrated that shelter programs can help promote victims' safety by reducing likelihood of future violence while they stay in shelter (Berk, Newton, Berk, 1986). Furthermore, legal advocacy services for IPV victims has a positive impact on women's experiences, as advocates provide emotional support during court hearings, and disseminate important information to victims (Weisz, 1999). Bell and Goodman's (2001) evaluation of a legal advocacy program found victims' emotional well-being increased and experiences of abuse decreased compared to women who did not work with legal advocates. In all, domestic violence services evaluated positively impact IPV victims.

While there is growing literature on the effectiveness of different IPV services for victims, there is less known about the effectiveness of such services for diverse populations, such as victims from marginalized racial, ethnic, or socioeconomic backgrounds. Researchers have called for creating culturally competent resources and training culturally sensitive providers to improve the experiences of non-white populations, specifically Latina and Black victims of IPV (Taft, Bryant-Davis, Woodward, Tillman & Torres, 2009; Dutton et al., 2000; West, Kantor, & Jasinski, 1998). Although researchers have attempted to sample women of diverse backgrounds when evaluating the effectiveness of IPV services, exploration of the impact of IPV services on women based on race/ethnicity and socioeconomic status is minimal. Furthermore, an

examination of the effectiveness of IPV services for victims based on the intersection of their race/ethnicity and socioeconomic status is nonexistent.

Theoretical Framework for Understanding Diverse Victims' Experiences with IPV Services

Based on the literature reviewed thus far, we understand racial ethnic differences and socioeconomic differences exist among victims related to their experiences of IPV, self-identified needs, and help-seeking. Few studies have focused on victims' attainment of services and perceived effectiveness of services, and there is a particular lack of research on differences based on race/ethnicity and SES. Additionally, although researchers have examined some differences in race/ethnicity and SES independently, few empirical studies have explored differences based on the intersectionality between victims' race/ethnicity and socioeconomic status, otherwise known as social location (Crenshaw, 1991).

In a recent conceptual model proposed by Kennedy and colleagues (2012), researchers highlight the significance of victims' differences in the context of attaining help. Specifically, researchers propose a help-attainment process for IPV victims whereby victims do or do not receive effective formal help over time. It attempts to describe the process of seeking help, receiving help, and the degree to which victims' needs are met once they receive help. In the model, contextual factors, such as social location, are highlighted that may impact victims' processes of seeking and receiving formal help.

The first stage of the model involves victims' appraisal of needs concurrent with their assessment of the availability of help and its fit with self-identified needs. The second stage of the model involves the process of formal help-seeking, which the researchers posit should be examined over time because women who seek help from one formal provider are generally more likely to seek help from other formal providers. The third stage of the model focuses on actually

accessing the formal help, and victims interface with formal systems that are in place to help them. The fourth stage of the model focuses on whether the services victims' gain access to are found helpful and meet their needs. The final and fifth stage of the model focuses on whether victims' attainment of services leads to positive mental health outcomes.

The researchers identify several factors that may affect whether victims attain effective help, including community (e.g. concentrated poverty), developmental (e.g. immigrating to a new country), and situational (e.g. presence of children) contexts. The role of intervention, such as community-based advocacy, is also described as a factor that facilitates the help-attainment process for victims at any stage of the model. The researchers further posit any stage of the help-attainment process can influence victims' future attempts to secure formal help. For example, if a victim has a poor experience with a service provider, she may be less likely to seek services from that provider or any other provider in the future. On the other hand, if the victim has a positive experience with a service provider, it may influence her to continue seeking more services elsewhere. A cascading effect can take place regarding the process of victims' help-seeking over time, suggesting positive outcomes are associated with engagement in the help-seeking process. Additionally, victims' self-identified needs may influence the help-attainment process based on their assessment of the availability of help, making it more or less likely for them to seek, and ultimately attain help.

The model suggests that social location, or the intersectionality of one's race/ethnicity, SES, and gender may influence each stage of the model. Fundamentally, social location can affect victims' lives by influencing what types of resources victims have access to and what kinds of stressors they may be exposed to, which in turn, may impact their identified needs and outcomes, and whether they are able to attain help that meets their needs. For instance, poor

women of color have increased risk of IPV, and experience greater severity of IPV, which may affect their appraisal of needs. Help-seeking processes may also be impacted by victims' social location, such that women of marginalized backgrounds who have fewer resources will be less likely to conceptualize their abuse as a problem that needs to be solved if they do not have the resources or knowledge of how to escape the abusive situation. Social location of victims may also limit access to community service providers who are able to offer help, and the ability of providers to offer help that effectively meets their needs. For the purposes of the current study, we will focus on social location (intersection of race/ethnicity and SES) and English as a Second Language status of IPV victims. Current IPV research does not include an understanding of how social location of victims and English as a Second Language may impact victims' self-identified needs, help attained, and other outcomes; this is an important gap in the literature that will be addressed with the current study.

Current Study

Victims of intimate partner violence have various needs due to abuse (e.g. safety, housing, gaining employment). Domestic violence programs play a crucial role in helping victims address their complex needs, through services including advocacy, counseling, legal and shelter services. Differences in race/ethnicity and SES have been linked to risks of victimization as well as victims' needs. Poor women of color may also face unique challenges in the processes of seeking and attaining effective formal help from domestic violence programs. This in turn may also affect victims' outcomes after receiving services. Whether the intersectionality of victims' race/ethnicity and SES and ESL status is associated with their profiles of needs upon entrance to services, and their outcomes after receiving services is still unknown. Furthermore, whether victims' profile of needs upon entrance to IPV services impacts their outcomes is also

unknown.

The current study will contribute to the literature by first examining IPV victims' needs upon entry to services using a statistical technique called cluster analysis. Cluster analysis may be used to identify subgroups of victims within a sample that are similar to one another and different from victims in other groups based on their service needs (Luke, 2005). Using cluster analysis will allow the researcher to get a comprehensive view of victims' profiles of needs in the context of domestic violence service programs. In this study, cluster analysis will be used to identify clusters of victims with similar needs, such that one cluster of victims may have a similar profile of needs and another cluster of victims may have a different profile of needs. Victims often enter services with a multitude of needs they hope can be addressed. In turn, it may be more productive for service providers to examine groups of needs instead of examining individual needs. When formal service providers have a broader view of their clients' needs upon entrance to services, their formal response may become more effective. Since many needs are interdependent and many sources of support for victims can address more than one need, formal providers can gain greater perspective and become more thoughtful in their approaches to address their clients' various needs. Formal providers understanding of the bigger picture of their clients' needs compared to only examining needs individually may positively impact clients' help-attainment. Cluster analysis will provide a more holistic approach to assessing victims needs to facilitate understanding of how best to meet those needs. Allen and colleagues (2004) formerly created clusters of victims' needs 6 months after they had left a domestic violence shelter program. However, the researchers solely studied victims' needs using a cluster analysis, and only in the context of receiving shelter services. In the present study, the researcher proposes to better understand victims' needs by exploring clusters of needs upon victims' *entry* to services

and by understanding patterns or clusters in victims' variety of needs upon entrance to shelter, legal, counseling, *and* advocacy services.

Secondly, the current study will contribute to the literature by examining how clusters of victims' needs influence help-attainment, specifically how clusters of needs influence perceived outcomes after receiving services (e.g. financial independence, safety, coping with domestic violence). By exploring the relationship between profiles of victims' needs upon entry to services and their outcomes, we can explore if various domestic violence programs are responding successfully to improve clients' outcomes. This information can help service providers create more efficient and effective service responses in their respective domestic violence service programs. To note, service providers in domestic violence programs are largely working in overburdened and understaffed conditions. Bringing light to common profiles of victims' needs upon entry to services may provide insight into improving future program interventions. In comparison to traditional approaches, where each provider may focus on addressing one need, when providers are given profiles of victims' needs, they obtain a richer context of their client, and thus can support one another to address that clients' needs more effectively. Generally, providers have a number of responsibilities, and one of them includes connecting their clients to the resources they do not have access to in their own agencies. If providers can have an understanding of profiles of needs, they may be able to connect their clients to sources of support that better meet their collective needs. Making these types of changes can facilitate the response of service providers to help meet victims' needs earlier in their help-attainment process.

Third, the current study will contribute to the literature by examining the role of social location and English as a Second Language in relationship to both victims' needs (clusters) and outcomes. Social location refers to the interaction between a victim's race/ethnicity and

socioeconomic status, which may affect a victim's process of attaining help to meet her needs. Although we understand differences of victims' needs independently based on their race/ethnicity and socioeconomic status, the current study will allow us to explore how the *interaction* between race/ethnicity and socioeconomic status may impact victims' profiles of needs. Examining the interaction between race/ethnicity and SES instead of exploring those constructs independently is useful to providers because it is important to represent the needs of the marginalized women they are serving. In addition, examining one factor (i.e., race/ethnicity) without the other (i.e., SES) does not provide sufficient information about how to provide safety and meet the needs of marginalized victims. Looking at the interaction of the two constructs will help us better understand IPV in diverse populations.

Historically, studies have focused on help-seeking behaviors of victims and victims' satisfaction with the services received, and less emphasis has been placed on the help attained by victims to meet their needs. Liang and colleagues' (2005) and Kennedy and colleagues' (2012) theoretical models of help-seeking and the help-attainment process highlight the importance of understanding the social location and ESL status of victims- a concept that has been widely argued in an effort to draw attention to barriers for diverse victims to access domestic violence services (Crenshaw, 1991; Sokoloff & Dupont, 2005). Although forming a theoretical understanding of victims' experiences is important, there is a need for practical findings for domestic violence service programs to better serve their clients (Sullivan, 2011). It is important to look at outcomes based on the social location and ESL of victims because based on our understanding in the literature, help-seeking is affected by social location and ESL status of victims. Kennedy and colleagues' theory clearly shows that when the help-seeking process is affected, so is the process of attaining help. Thus, it is important to examine social location and

ESL status of victims as it can directly impact their outcomes.

Finally, there is a lack of studies of victims' needs and help-attainment outside of the shelter context. Previous investigators have explored diverse victims' needs in shelter settings (Lyon et al., 2008) but these findings may not be generalizable to victims who attain other common domestic violence services and do not receive shelter services, such as counseling and legal advocacy services. The current study proposes exploration of victims' needs based on victims who sought counseling, advocacy, legal services, and shelter services. This allows the researcher to contribute more generalizable findings of IPV victims' needs based on other domestic violence services that are commonly utilized within the population. Gondolf's (1988) study and even in more recent studies (Lyon et al., 2008), examination of diverse victims' experiences was only based on receiving shelter services, lacking an exploration of the intersectional identity of victims in multiple service contexts. This gap in the literature will also be addressed in the present study. Altogether, prior literature on victims' needs, diversity and needs, and diversity in victims' outcomes are focused on shelter samples. Therefore, examination of the current sample of IPV victims whom may have received shelter, legal, counseling, or advocacy services, is a beneficial sample.

The current study will focus on the needs and help-attainment of White, Black, and Latinx female victims of IPV. This is consistent with a prior study of racial differences in help-seeking by Gondolf and colleagues (1988). The most common racial backgrounds in Chicago, and in people receiving IPV services in Chicago are White, Black, and Latino/a. Limiting the sample to White, Black, and Latino/a victims will allow for sufficiently large group sizes for statistical analyses. The current study will also use education level as a proxy for socioeconomic status. Socioeconomic status has been defined as "an attempt to capture an individual's or group's

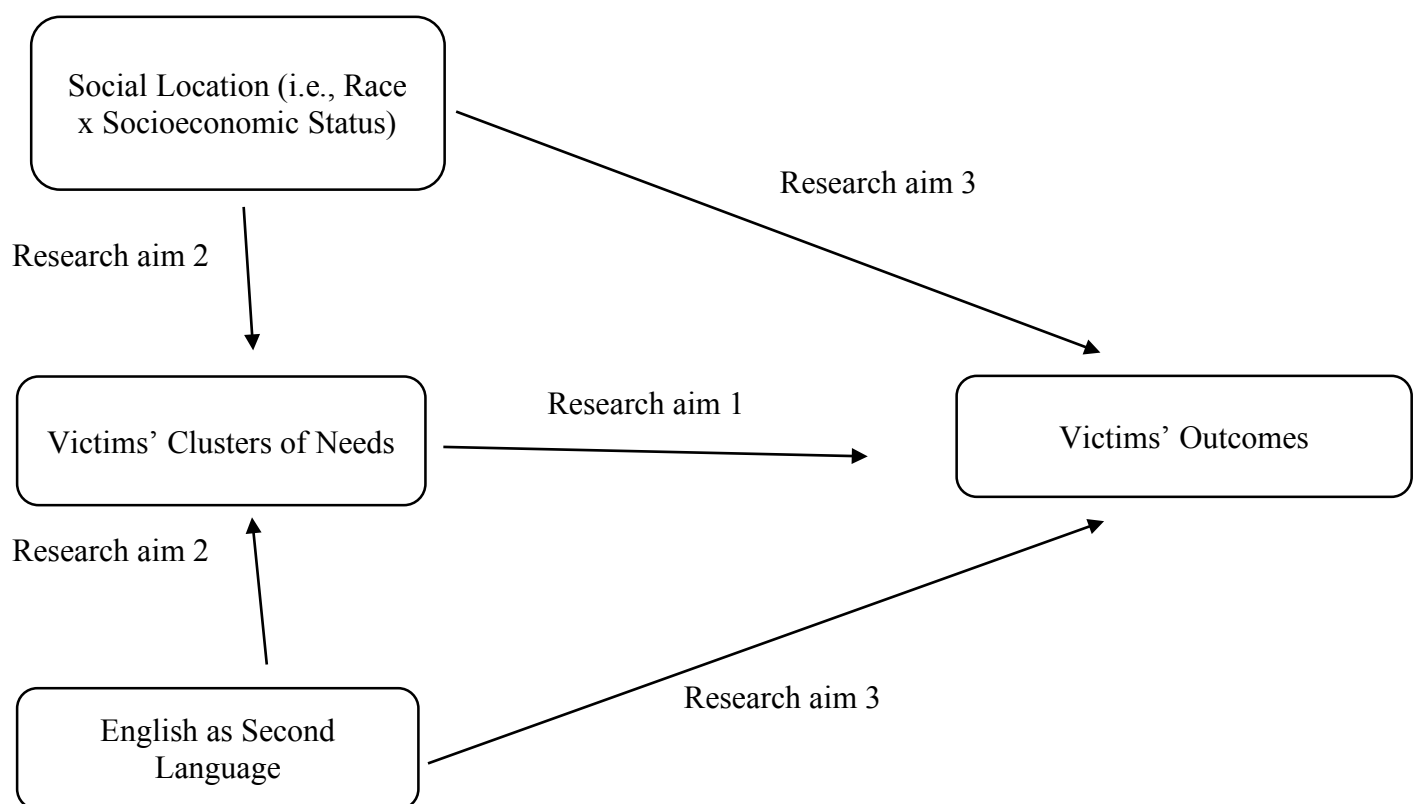
access to the basic resources required to achieve and maintain good health” (Shavers, 2007; p.1013). Shavers (2007) argues the measurement of SES depends partially on its relevance to the population being studied and the outcomes that are being studied. Other measures of SES have included current income (e.g. individual annual income, annual household income), and occupation (e.g. employment status, specific occupational group). However, education level will be used to define SES in the current study as this factor is a fairly stable measure of someone’s SES beyond early adulthood, it is practical, convenient, and easy to measure (Shavers, 2007). Even more importantly, considering victims’ needs and their life circumstances upon seeking services from domestic violence programs, other indicators of SES, such as income and occupational status may be unstable, especially if they are seeking safety from their abusers. This makes both income and occupational status poor indicators of victims’ SES. Shavers (2007) has also highlighted that income measures usually receive low response rates and do not include all assets of a person’s income, and measuring occupation often lacks precision in measurement and does not account for racial/ethnic differences in benefits arising from employment (Shavers, 2007). For these reasons, education will be used as a proxy for victims’ SES. Additionally, English as a Second Language status of victims will be examined.

Therefore, the current study will examine the social location, ESL status, needs upon entry to services, and help-attained (i.e., outcomes six months after beginning services) within a sample of 464 IPV victims who received shelter, legal, counseling, or advocacy services in Chicago. The study will examine the following research questions:

1. Do clusters of victims’ needs upon entrance to services predict their perceived outcomes six months after beginning services?

2. Do social location (interaction between race and SES) and whether victims speak English as a second language predict clusters of their needs when beginning services?
3. Does social location (intersection between race and SES) and whether victims speak English as a second language predict perceived outcomes six months after beginning service?

Figure 1: Model of Research Aims



Methods

The current study is of secondary analyses of data collected from Riger and colleagues (2016) on the Domestic Violence Outcome Measures (DVOM) Project. All study procedures were completed by the Chicago Metropolitan Battered Women's Network and its 15

participating agencies over a period of 3 years (Riger, George, Byrnes, Durst-Lee, & Sigurvinsdottir, 2016). The DVOM Project was originally implemented to determine the effectiveness of existing services for victims of intimate partner violence. The research questions of the current study incorporate variables from the Life Experiences Post-Survey and inform us about factors that may affect victims' outcomes. These research questions are in line with the original research questions of the DVOM Project (Riger et al., 2016). Provider directors of the 15 agencies were notified of the current study proposal, and were given a chance to voice any concerns or decline the project. All provider directors accepted the proposal for the current study, and the secondary analyses were completed. The following describes methods used to collect the initial data of the DVOM Project, which in turn was used to complete the current study.

Research Site

Chicago Metropolitan Battered Women's Network (CMBWN) is a "collaborative membership organization dedicated to improving the lives of those impacted by domestic violence through education, public policy and advocacy, and the connection of community members to direct service providers" (Chicago Metropolitan Battered Women's Network, 2017). One of the programs developed through the network is called the Centralized Training Institute (CTI), which focuses on education and offers coordinated training for domestic violence advocates and allied professionals. The CBWN is also established as a forum for information exchange, within the Cook County domestic violence services community. It is committed to staying informed on the field of domestic violence service provision. Collaboration with member programs allow CBWN leadership to disseminate information quickly and gather comprehensive feedback. In this way, the CBWN is distinctively positioned to stay well-informed of, and respond to, victims' needs and trends affecting domestic violence service delivery in Chicago.

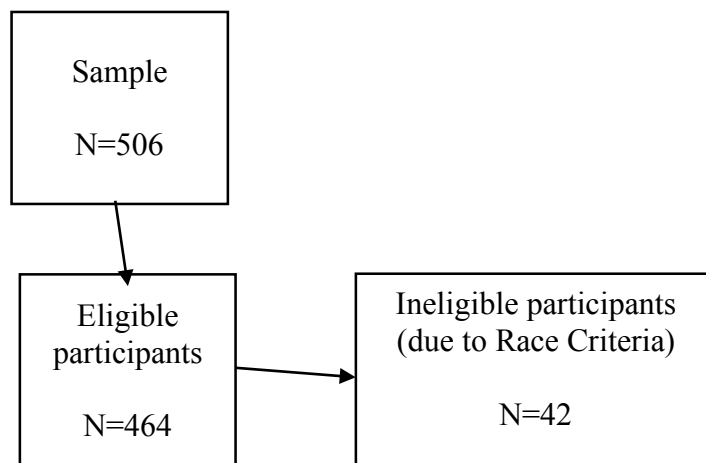
Participants and Recruitment

The target population of this study was victims of intimate partner violence. The project was implemented by the CMBWN and 15 of the network's member agencies over a timespan of 3 years with support from researchers at Loyola University and University of Illinois at Chicago beginning in 2013 (Riger et al., 2016). To be eligible, participants had to receive one of the following core services at any of the 15 member agencies: shelter, counseling, court advocacy, or legal services. Specifically, staff members recruited clients based on the following criteria: clients must have been in shelter for 6 days, clients must have had at least three contacts with a counselor, or clients had one contact for court advocacy services or other legal services.

Participants were recruited to the study when they began services from the respective agencies they were seeking help from. Staff were trained to ask all clients that were eligible to participate in the study. To recruit participants, staff members from the 15 agencies verbally informed their clients about the purpose of the DVOM project, the procedures, and the compensation participants would receive for their time. If clients were interested in participating, the staff member would complete a form with the client consenting to be contacted in the future. The staff member would also provide a project information sheet with more details about the project. Once clients agreed to participate, staff members also asked their clients to call or email them back once a month until they were ready to complete the survey (generally 6 months after beginning their services; 3 months for those receiving court advocacy). In addition to receiving a gift card for \$50 for taking the survey, the participants could also receive \$5 for each time they called, emailed, or met in-person with a staff member monthly. This was designed to encourage participants to maintain contact with the agency between the time they began engaging in services until the time they were asked to complete the survey.

The participants were asked to complete a survey 6 months following their initial engagement in services. The manager of the project completed site visits at each of the fifteen agencies that volunteered to participate to train staff on the recruitment process, including completion of role-play exercises and review of recruitment materials with agency staff. The project manager also revisited sites when agencies experienced staff turnover in order to retrain staff to continue recruiting participants. Once staff members were trained at each of the agencies, they could recruit clients who met criteria to participate in the project. In some clients' cases, staff members recruited a participant later than their originally set standards for the project. For instance, a client who was first in contact with a staff member for court advocacy services may have been in a jail setting, which is not an ideal setting for recruitment. A client who was being supported in this type of scenario would have been recruited at a later date when making contact with a staff member at an agency office. Additionally, only new clients of the agency were recruited for this project. In other words, clients who had already been receiving some services before the agencies began recruiting participants would not have been considered eligible to participate in the study. A sample of 506 people completed the survey. 464 people were analyzed for the purposes of the current study because victims who did not identify their race and ethnicity, identified as multiracial, or identified as other racial/ethnic categories (e.g., Asian-America) were not analyzed. This exclusion process 1) ensured all participants in the study were categorized into one of the three most common racial backgrounds receiving IPV services in Chicago (i.e., White, Black, and Latina), and 2) allowed for sufficiently large group sizes for statistical analyses.

Figure 2.
Sample Flow Chart



Procedures

Each client who agreed to participate in the project was given an information sheet about the project, signed a consent form to participate, and identified people to contact who could help the staff member get in contact with the client (as needed) 6 months after beginning the services at their agency. Clients were also informed that they did not need to participate in the project if they did not want to, and if they refused to participate, it would not affect their relationship with the agency they are receiving services from. Of those clients who agreed to participate in the project, staff members at each agency maintained monthly contact. After 6 months of first beginning services, participants were asked to complete the survey by staff. All of the participants were given the option to complete the survey on paper or online. Both versions of the survey gave participants the opportunity to complete the survey at their respective agencies or outside of their agencies, such as the local public library (if women did not have access to internet). In addition, staff members provided support to some participants as they completed the survey because participants often had difficulty reading or understanding the questions being asked. Agency staff were accessible to help the participants complete the survey as was needed.

The survey was completed six months after entering services. Participants were asked to retrospectively report what services they found helpful and what kinds of help they needed upon entrance to services. The survey was broken up into four sections. The first section focused on asking non-identifying demographic questions, such as employment status, marital status, type of current residence, and type of health insurance. The second section of the survey requested participants think about the services they may have wanted when they first sought help. In other words, the participants were asked to think about what needs they had when they first entered the domestic violence agency to seek support. The second section also asked participants to think about what changed as a result of the help they received from the domestic violence agency (i.e., their outcomes). The third section of the survey asked participants to focus on the things they needed help with now, also known as their current needs, six months after receiving services. The final section of the survey was left open for participants to provide any comments they had regarding their participation in the project. Data collected from the surveys was linked to InfoNet (Information Network)⁴ demographic data that are collected and managed by the Illinois Criminal Justice Information Authority (ICJIA). Please see more details below.

Measurement

CMBWN established a draft of the survey used with a sample of victims who had received services at 15 of its member agencies. Numerous suggestions from service providers and clients led to multiple revisions of the survey and procedures. The survey was then pilot tested with clients currently receiving services from participating agencies, and revised based on their feedback. Once the survey was finalized, it was translated into Spanish, French, Tagalog,

⁴ InfoNet is a web-based data collection and reporting system used by victim service providers in Illinois.

Urdu, and Arabic using professional translation services. Using a de-identified case ID, the participants' information collected from the survey was connected to their basic information collected on InfoNet, including race, ethnicity, education, English as a second language, and income among other variables.

Victims' Needs. To assess victims' needs upon starting services, women were asked "When I came to the domestic violence agency 6 months ago, I needed this" Please check the box if the service was needed, followed by a list of services, which can be seen in Table 1. IPV victims' service needs (Sullivan, Basta, Tan & William, 1992; George et al., 2010) were assessed with items adapted from a study of Chicago's homeless population (Sosin et al, 2011; Riger et al., 2016). Twelve service needs were measured. Of the twelve service needs identified, eight of the needs were measured by more than one item to categorize the victim as having a need for that particular service. For instance, if a victim checked off the box for needing either Emergency Shelter or Permanent Housing, then she would be identified as needing help with Housing/Shelter. Table 1 lists the twelve needs that were measured and their corresponding items.

Table 1: Survey Items Assessing Victims' Needs upon Entrance to Services

Help with Housing/Shelter:

- Emergency Shelter
- Permanent Housing

Help Getting Benefits:

- TANF, Food Stamps, etc

Help with Finances:

- Emergency cash from agency
- Help with credit history
- Financial planning/ literacy
- Help with Getting Work

Help with Language/ Translating

Help with Food

Help with Clothing

Help with Health Care

Help with Mental Health:

with case manager or agency

- Therapy (with therapist)/Counseling (Individual or group)
- Family Counseling.
- Help with Substance Abuse Treatment

Help with Parenting:

- Help with parenting
- Help with child care

Help with Personal Safety:

- Developing a safety plan
- Managing contact with partner/ex-partner

Help with Legal Services:

- Legal advocacy to get an order of protection
- Legal advocate going with you to court
- Immigration
- Divorce
- Child custody
- Visitation

Help with Transportation:

- To/from shelter
- To/from job
- To/from job seeking
- To/ from court

Victims' Outcomes. Participants were asked, "How have things worked out as a result of the help you received from the domestic violence agency?" Participants responded to a list of 22 possible outcomes, called the Domestic Violence Outcome Measure. Some items were adapted, with permission, from Sullivan, Baptista, O'Halloran, Okroj, Morton, & Stewart, 2008; others items were developed for this survey). Participants responded based on a three-point scale ('a lot', 'some' and 'none') with a fourth category of 'does not apply.' An exploratory factor analysis was conducted and revealed five subscales: Coping with Domestic Violence ($\alpha = 0.72$), Financial Independence ($\alpha = 0.90$), Understanding Domestic Violence (such as causes and impact; $\alpha = 0.85$), Safety ($\alpha = 0.86$), and Substance Abuse (referring to substance abuse problems of both victim and perpetrator of violence; $\alpha = 0.86$). One example item of Coping with Domestic Violence subscale is "I am more confident about making decisions." An example of Financial Independence is, "I can support myself financially." One example item of the Understanding Domestic Violence is, "I understand how domestic violence affects me." An example of Safety is "I feel safe from violence in my home," and an example item of the Substance Abuse subscale is "I am getting help for my substance abuse problems." Table 2 shows a full list of the items included in each of the five outcome measures. The scores for each subscale were computed using a mean of the items for each subscale.

*Table 2: Survey Items Assessing Victims' Outcomes Six Months After Beginning Service***Coping with DV**

I understand my legal rights as a domestic violence victim
 I am more confident about making decisions
 I have ways to keep myself safe
 I am able to cope with the impact of domestic violence on me
 I know how to report violations of my order of protection
 I have ways to manage contact with my abuser

Financial Independence

I can support myself financially
 I can support my children financially
 I am able to support myself and my children

Understanding DV

I understand about how domestic violence affects me
 I understand about how domestic violence affects my children
 I understand about the causes of domestic violence

Safety

My children are safe from violence in the home
 I feel safe from violence in my home
 I have ways to keep my children safe

Substance Abuse

I have begun to explore the role my abuser's substance abuse plays in my life
 I am getting help for my substance abuse problems
 I have begun exploring the role substance abuse plays in my relationship

Note: Rated on a three-point scale; 2= a lot, 1= some, 0= none.

Social location. Social location was measured by creating an interaction between race/ethnicity and socioeconomic status (i.e., education) of victims. Race/ethnicity of victims was collected from the InfoNet database, which was categorized into the following groups: Black/African America, White, and Latina. Other racial/ethnic groups were excluded in order to have large enough group sizes. Based on recommendations from Shavers (2007), socioeconomic status of the victims was measured based on victims' education status. Victims' education status was collected from the InfoNet database. The educational status of victims was categorized into the following groups: less than high school graduate, high school graduate or some college, and college graduate or higher.

English as Second Language (ESL). ESL was categorized as 'yes'=1 or 'no'=0. The ESL variable was measured by 1) whether the victims' primary language is English or not English from Infonet 2) whether the case manager who met with the victim reported she has limited English proficiency and requires an interpreter (yes or no) in Infonet, and 3) whether the survey was administered to the client in English or Spanish from the survey. If a victim reported her primary language was not English, if her case manager reported she required an interpreter, or if the survey was administered in Spanish, then the victim was categorized as 'yes' for ESL.

Analytic Plan

For all analyses of the current study, missing data were minimal and therefore pairwise deletion was used.

Research Aim 1: Examining clusters of victims' needs upon entrance to services as a predictor of perceived outcomes. To investigate whether victims' clusters of needs upon entrance to services predicts their perceived outcomes six months after beginning services,

multiple linear regression analyses were conducted. However, cluster analysis was conducted first to identify profiles of victims' needs upon entrance to services.

Cluster analysis. For the current study, cluster analysis was used to identify clusters of victims' needs upon entrance to services. Cluster analysis is an explorative analysis technique that helps us identify structures within the data, such as clusters or subgroups of cases (i.e., observations, participants) based on multiple variables (Luke, 2005; Rapkin & Luke, 1993). By running a cluster analysis, homogenous groups of cases were identified, meaning cases within a group were more similar to each other than they were to cases in a different group (based on the variables of interest identified). In the current study, victims were grouped based on which needs they identified upon entrance to an agency six months earlier. Please see Table 1 for summary of victims' needs upon entrance to services.

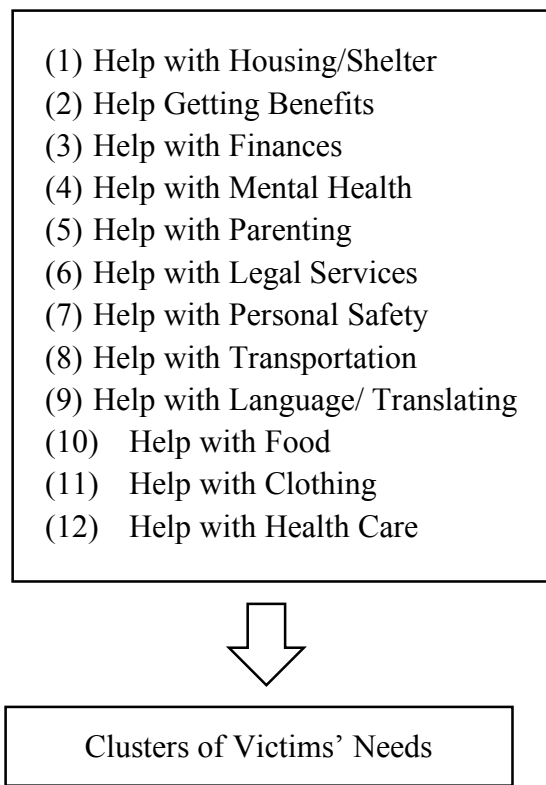
In order to complete cluster analysis, data were inspected to identify any errors in entry and coding. The results of a cluster analysis can be impacted by high correlations among variables. Therefore, correlations among the twelve variables were examined before the cluster analysis was completed. This revealed the correlations were moderate, and therefore it was acceptable to proceed with the analysis.

For the present study, a two-step procedure was used, involving hierarchical and optimization cluster analysis methods. The hierarchical cluster analysis was completed, using Ward's linkage method, to determine the appropriate number of clusters. With this method, the analysis began with N clusters (464 clusters in this study), of one case each. A proximity matrix was created to represent the extent to which each cluster is similar to or dissimilar to the other clusters. To assess the similarity and dissimilarity among clusters, squared Euclidean distances were used because they are appropriate for categorical variables (Rapkin & Luke, 1993). This

analysis combined two cases that are most similar to one another to form one cluster. After that one cluster was created, a new proximity matrix was also created, but now in reference to $n-1$ clusters (463 clusters). Again, two cases that are the most similar are combined, and the process continues to combine cases until they have all combined into one cluster of $n = 464$ cases. The results from this analysis provided a dendrogram that visually displays each step of the specific combination of cases and how much heterogeneity is added to the cluster during each step. The results from this analysis also included a list of heterogeneity coefficients for each combination of cases that indicates the amount of heterogeneity that was added during each combination. The number of clusters was determined based on consideration of multiple factors (e.g. statistical, conceptual; Rapkin & Luke, 1993). By inspecting the inverse scree plot of the heterogeneity coefficients, the researcher identified unusual large jumps in heterogeneity; such steep jumps indicate the last agglomeration increased heterogeneity a disproportionate amount and therefore the cluster solution prior (i.e., involving one more cluster) was preferable (Clatworthy, Buick, Hankins, Weinman & Horne, 2005). The researcher also considered the total number of clusters, the number of cases per cluster, and if the groups that were formed conceptually made sense given the sample of interest. (Clatworthy et al., 2005; Rapkin & Luke, 1993). This process led to the selection of 5 clusters. After the hierarchical cluster analysis was used to determine the appropriate number of clusters, optimization cluster analysis was conducted.

Next, optimization cluster analysis was conducted for 5 clusters. The program generates a solution consisting of that many clusters, and classifies cases into clusters in a way that maximizes the homogeneity within clusters and minimizes the heterogeneity across clusters. Optimization cluster analysis was used to classify victims into clusters based on their needs upon entrance to services.

Figure 3:
Cluster Analysis



Regression. Once clusters of victims' needs upon entry to services were determined using the cluster analyses described above, victims' cluster membership was dummy coded as the independent variable in a series of linear regression models (Field, 2009) to assess whether clusters' of victims' needs upon entrance to services predicts victims' outcomes. Victims' outcomes were identified as the dependent variables in the regression models. Therefore, five regression models were planned, with clusters of needs variables predicting a victim-outcome subscale as the dependent variable, one for each outcome subscale (i.e. Coping with Domestic Violence, Financial Independence, Understanding Domestic Violence, Safety, and Substance Abuse). However, the Substance Abuse outcome subscale was dropped due to a high amount of missing data (48.7% n=226 missing). Therefore, four regressions were run, with clusters of needs variables predicting a victim-outcome subscale as the dependent variable, one for each of

the four remaining outcome subscales (i.e. Coping with Domestic Violence, Financial Independence, Understanding Domestic Violence, Safety).

Regression assumptions. All regression assumptions were examined, including, heteroscedasticity, multicollinearity, normality of residuals, and outliers/influential cases. Violation of assumptions (normality of residuals and heteroscedasticity) were addressed using bootstrapping (Field, 2009).

Research Aim 2: Examining victims' social location and ESL status as a predictor of cluster of victims' needs upon entrance to services. To investigate whether victims' social location and ESL status predict their cluster of needs upon entrance to services, a multinomial logistic regression was conducted. This is appropriate because the dependent variable has multiple categories, and the model breaks down the dependent variable into a series of comparisons between two categories. Clusters of victims' needs were entered as the dependent variable with one cluster categorized as the reference group. The reference group cluster was compared to each of the other clusters of victims' needs. Victims' social location and English as a second language were entered as the independent variables. Victims' social location was also dummy coded, with one group categorized as the reference group.

Research Aim 3: Examining victims' social location and ESL status as a predictor of perceived outcomes (six months after beginning services).

To investigate whether victims' social location and ESL status predicted their perceived outcomes six months after beginning services, multiple OLS linear regression analyses were conducted. For this question, four regressions were run, with social location and ESL as the independent variables predicting a victim-outcome subscale as the dependent variable, one for each outcome subscale (i.e. Coping with Domestic Violence, Financial Independence,

Understanding Domestic Violence, and Safety). The Substance Abuse Outcome was dropped from analyses due to the high amount of missing data (48.77%, $n=226$). Social location of victims was dummy coded because it is a categorical variable, and were entered as predictors in the model (Field, 2009). Examination of regression assumptions for Research Aim 3 involved identical procedures as Research Aim 1 (please see above).

Power

For the three research aims proposed, post hoc power analyses were computed with G*Power (Faul, Erdfelder, Lang, & Buchner, 2007). For research aim 1 (clusters of needs predicting outcomes), a post-hoc power analysis for multiple regression with 4 predictors (5 clusters), and assuming an effect size f^2 of 0.15, showed excellent power ($>.95$). For research aim 2 (Social Location and ESL predicting clusters of needs), a post-hoc power analysis for logistic regression showed excellent power ($>.95$). For research aim 3 (Social Location and ESL predicting outcomes), a post-hoc power analysis for multiple regression with 9 predictors, and assuming an effect size f^2 of 0.15, showed excellent power ($>.95$).

Results

Descriptives

The following section provides information on the $n = 464$ women domestic violence victims whose participation in the DVOM project allowed for secondary analyses in the current study, including victims' social location, English as a Second Language status, needs, and outcomes.

Participants. Domestic violence victims in the current study were female (100%; $n=464$), 29.7% White ($n=138$), 31% African American ($n=144$), and 39.2% Hispanic/Latina ($n=182$). Over half of the participants ($n=244$; 55%) were high school graduates or completed some college, under a quarter of participants ($n=100$; 22.5%) had less than a high school

diploma, and under a quarter of participants (n=100; 22.5%) were college graduates or completed some higher education.

Victims' social location. Domestic violence victims' social location was defined by the interaction between their race/ethnicity and socioeconomic status (i.e. education level). 4.3% of victims were White with less than a high school diploma (n=19), 14.9% of victims were White, high school graduates or completed some college (n=66), 9.5% of victims were White, college graduates or completed some higher education (n=42), 3.2% of victims were African American with less than a high school diploma (n=14), 20% of victims were African American, high school graduates or completed some college (n=89), 8.1% of victims were African American college graduates or completed some higher education (n=36), 15.1% of victims were Hispanic/Latina with less than a high school diploma (n=67), 20% of victims were Hispanic/Latina, high school graduates or completed some college (n=89), and 5% of victims were Hispanic/Latina college graduates or completed some higher education (n=22).

Victims' English as a second language status. A majority of the victims (82.3%; n=373) spoke English as their primary language, while 17.7% (n=80) of victims spoke English as a Second Language.

Victims' needs. Victims checked off what service needs they wanted help with upon entry to services. They completed the survey six months after beginning services. Table 3 on the next page indicates the number and percentage of victims who endorsed needing help with each of the twelve different service needs:

Table 3: Victims' Needs Upon Entrance to Services

<u>Needs</u>	<u>Yes</u>		<u>No</u>	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Mental Health	323	69.6%	141	30.4%
Legal Issues	290	62.5%	174	37.5%
Benefits	268	57.8%	196	42.2%
Personal Safety	243	52.4%	221	47.6%
Finances	237	51.1%	227	48.9%
Housing	199	42.9%	265	57.1%
Food	151	32.5%	313	67.5%
Transportation	129	27.8%	335	72.2%
Clothing	120	25.9%	344	74.1%
Parenting	115	24.8%	349	75.2%
Language Translating	105	22.6%	359	77.4%
Healthcare	93	20%	371	80%

Victims' outcomes. Victims reported relatively high outcomes six months after beginning services as a result of the help they received from the domestic violence agency. Outcome responses were given on a three-point scale (2= 'a lot', 1= 'some' and 0 = 'none'). Average outcome ratings were highest for Understanding Domestic Violence ($M=1.83$, $SD=.38$), followed by Safety ($M=1.80$, $SD=.39$), Coping with Domestic Violence ($M=1.70$, $SD=.34$), and Financial Independence ($M=1.34$, $SD=.62$).

Clustering victims' needs. Victims were clustered based on the twelve service needs they reported wanting help with upon entrance to services. The following is a list of the twelve needs: Housing/Shelter, Getting Benefits, Finances, Mental Health, Parenting, Legal Services, Personal Safety, Transportation, Language/Translating, Food, Clothing, and Health Care. Bivariate correlations among these twelve clustering variables can be seen in Table 4 on the next page. Many of the needs were significantly, positively correlated.

Table 4: Bivariate correlations of twelve clustering needs variables

	1	2	3	4	5	6	7	8	9	10	11
1. Benefits											
2. Finances	.210**										
3. Mental Health	0.004	.338**									
4. Personal Safety	-0.038	.180**	.299**								
5. Legal Issues	-0.032	.106*	.137**	.233**							
6. Transportation	.141**	.319**	.128**	.129**	0.083						
7. Language Translating	.139**	.138**	.133**	.144**	.227**	.101*					
8. Food	.277**	.376**	.189**	.165**	.120**	.339**	.229**				
9. Healthcare	.232**	.361**	.155**	.143**	.099*	.254**	.244**	.342**			
10. Clothing	.226**	.401**	.133**	0.08	-0.01	.282**	.186**	.441**	.319**		
11. Housing	.115*	.352**	.270**	.120**	-0.012	.347**	0.052	.179**	.154**	.304**	
12. Parenting	0.066	.282**	.238**	.168**	0.063	.179**	0.036	.230**	.149**	.197**	.188**

** $p < .01$; * $p < .05$

To determine the appropriate number of clusters for the optimization cluster analysis, a hierarchical analysis was conducted. The inverse scree plot and dendrogram were reviewed in order to choose the number of clusters for the optimization cluster analysis. The inverse scree plot was used to identify unusually large jumps in heterogeneity coefficients. A reasonable number of clusters was identified to achieve parsimony interpretability of victims' clusters of needs. Based on these results, five clusters were identified as most appropriate and therefore, optimization cluster analysis was conducted for five clusters. Victims were then classified into one of the five clusters according to their profile of needs on the twelve clustering variables. Table 5 provides descriptive information on victims' twelve needs by cluster, and presents Chi-Squared results for each of the twelve clustered variables. The Chi-squared tests were used to assess whether there were statistically significant differences between clusters on each of the twelve variables. All twelve clustering variables varied by cluster, suggesting the clusters did capture meaningful variability in victims' profiles of needs. The salient features of these five clusters will be described in the next section.

Clusters. Clusters represent victims' profiles of needs at the time of services. Cluster one is comprised of 21% of the sample (n=97). Cluster one is named "High Needs" due to the majority of the victims in the cluster were generally more likely to endorse other service needs than victims in the other clusters. To note, a majority of victims in cluster one (61%) reported needing helping with language translation. Cluster two is the smallest cluster, comprised of 13% of the sample (n=59). Cluster two is named "Benefits/Low Needs" because victims in this cluster were more likely to report needing help with benefits, such as TANF than victims in other clusters; however, they were generally less likely to endorse other needs. Cluster three is comprised of 21% of the sample (n=98). Cluster three is named "Economic Needs." Victims in

cluster three were more likely to endorse need for services related to their finances, housing, food, and clothing than victims in the other clusters. Cluster four is comprised of 20% of the sample (n=94). Cluster four is named "Legal Needs" due to all victims' in this cluster reporting that they needed support on legal issues. Cluster five is the largest cluster, comprised of 25% of the sample (n=116). Cluster five is named "Mental Health Needs" because the victims generally were more likely to report needing mental health services, such as individual therapy, family therapy, and substance abuse treatment, but less likely to report other needs, such as benefits, transportation, food, and clothing.

Table 5: Cluster Analysis of Victims' Needs Upon Entrance to Services

Cluster Size		Cluster1	Cluster2	Cluster3	Cluster4	Cluster5	Chi-Squared Tests
		n=97 (20.9%)	n=59 (12.7%)	n=98 (21.1%)	n=94 (20.3%)	n=116 (25%)	
<u>Needs</u>							
Benefits	Yes	87.60%	81.40%	73.50%	43.60%	19.00%	$\chi^2(4)=138.11^{**}$
	No	12.40%	18.60%	26.50%	56.40%	81.00%	
Finances	Yes	89.70%	20.30%	90.80%	10.60%	33.60%	$\chi^2(4)=217.78^{**}$
	No	10.30%	79.70%	9.20%	89.40%	66.40%	
Mental Health	Yes	91.80%	16.90%	86.70%	27.70%	97.40%	$\chi^2(4)=234.01^{**}$
	No	8.20%	83.10%	13.30%	72.30%	2.60%	
Personal Safety	Yes	78.40%	6.80%	50.00%	27.70%	75.90%	$\chi^2(4)=124.31^{**}$
	No	21.60%	93.20%	50.00%	72.30%	24.10%	
Legal Issues	Yes	89.70%	0.00%	53.10%	100.00%	49.10%	$\chi^2(4)=197.89^{**}$
	No	10.30%	100.00%	46.90%	0.00%	33.90%	
Transportation	Yes	39.20%	11.90%	67.30%	8.50%	8.60%	$\chi^2(4)=128.76^{**}$
	No	60.80%	88.10%	32.70%	91.50%	91.40%	
Language Translating	Yes	66.00%	8.50%	6.10%	12.80%	15.50%	$\chi^2(4)=134.69^{**}$
	No	34.00%	91.50%	93.90%	87.20%	84.50%	
Food	Yes	83.50%	10.20%	50.00%	9.60%	5.20%	$\chi^2(4)=203.99^{**}$
	No	16.50%	89.80%	50.00%	90.40%	94.80%	
Healthcare	Yes	58.80%	5.10%	20.40%	3.20%	8.60%	$\chi^2(4)=125.09^{**}$
	No	41.20%	94.90%	79.60%	96.80%	91.40%	
Clothing	Yes	53.60%	6.80%	56.10%	5.30%	3.40%	$\chi^2(4)=148.04^{**}$
	No	46.40%	93.20%	43.90%	94.70%	96.60%	
Housing	Yes	46.40%	23.70%	94.90%	9.60%	32.80%	$\chi^2(4)=165.00^{**}$
	No	53.60%	76.30%	5.10%	90.40%	67.20%	
Parenting	Yes	44.30%	11.90%	35.70%	5.30%	21.60%	$\chi^2(4) = 51.20^{**}$
	No	55.70%	88.10%	64.30%	94.70%	78.40%	

 $^{**}p < .01$

Research Aim 1: Clusters of Needs Predicting Outcomes. A series of 4 multiple OLS regressions were conducted to assess the influence of clusters (victims' profiles of needs at the time of starting services) on victims' outcomes 6 months after receiving services (i.e., Coping with Domestic Violence, Financial Independence, Understanding Domestic Violence, and Safety). Assumptions of normality and homoscedasticity were not met. Thus, bootstrapping was used to generate confidence intervals, and significance tests of the model parameters. Clusters were dummy coded and Benefits/Low Needs Cluster was defined as the reference group. Findings suggest that compared to victims in Benefits/Low Needs Cluster, victims in the Legal Needs Cluster $b = .14$ [.021, .261], $p = .022$ had higher ratings on Safety Outcomes. No other significant effects of cluster membership were found for Coping with DV, Understanding DV, and Financial Independence. Bivariate correlations of these variables can be seen in Table 6, followed by the multiple regression results for all four models (Table 7).

Table 6: Correlations for Regression Analyses with Clusters as Predictors of Domestic Violence Outcomes (Research Aim 1)

	1	2	3	4	5	6	7	8
1.High Needs								
2.Benefits/Low Needs	-.196**							
3.Economic Needs	-.266**	-.198**						
4.Legal Needs	-.259**	-.192**	-.261**					
5.Mental Health Needs	-.297**	-.220**	-.299**	-.291**				
6.Coping DV	0.064	-0.006	-0.026	-0.064	0.028			
7.Financial Independence	-0.074	0.055	-0.021	0.075	-0.021	.425**		
8.Understanding DV	0.051	0	0.046	-.139**	0.038	.522**	.222**	
9.Safety	0.023	-0.076	-0.049	0.081	0.008	.492**	.324**	.283**

** $p < .01$; * $p < .05$

Table 7: Multiple Regression Results Examining Clusters of Victims' Needs Upon Entrance to Services Predicting Victims' Outcomes at Six Months After Beginning Services

		b (95% bootstrapped confidence intervals)	SE (B)	β	<i>t</i>	<i>p</i>
Model 1: Coping with DV (n=460)	Clusters					
	(Constant)	1.70 (1.61, 1.78)	0.04		38.23	0.00
	High need	0.05 (-0.05, 0.15)	0.05	0.06	0.85	0.37
	Economic	-0.01 (-0.13, 0.1)	0.06	-0.01	-0.21	0.83
	Legal	-0.04 (-0.15, 0.08)	0.06	-0.05	-0.66	0.52
	Mental Health	0.02 (-0.09, 0.13)	0.05	0.03	0.40	0.71
Model 2: Financial Independence (n= 451)	(Constant)	1.471 (1.32, 1.62)	0.08		17.84	0.00
	High need	-0.179 (-0.36, 0.01)	0.10	-0.12	-1.72	0.06
	Economic	-0.117 (-0.33, 0.08)	0.10	-0.08	-1.12	0.27
	Legal	0.005 (-0.21, 0.21)	0.10	0.00	0.04	0.96
	Mental Health	-0.11 (-0.32, 0.08)	0.10	-0.08	-1.13	0.25

Model 3:Understanding DV
(n=459)

(Constant)	1.83 (1.71, 1.92)	0.05		37.37	0.00
High need	0.04 (-0.09, 0.17)	0.07	0.04	0.61	0.54
Economic	0.03 (-0.08, 0.17)	0.06	0.04	0.54	0.61
Legal	-0.10 (-0.23, 0.05)	0.07	-0.11	-1.65	0.14
Mental Health	0.025 (-0.08, 0.15)	0.06	0.03	0.41	0.68

Model 4:Safety
(n= 454)

(Constant)	1.72 (1.62, 1.83)	0.05		33.84	0.00
High need	0.10 (-0.03, 0.24)	0.07	0.10	1.47	0.16
Economic	0.041 (-0.10, 0.18)	0.07	0.04	0.63	0.57
Legal	0.14 (0.02, 0.26)	0.06	0.15	2.15	0.02
Mental Health	0.08 (-0.04, 0.20)	0.06	0.09	1.32	0.20

Note. Bootstrap results are based on 1000 bootstrap samples. Reference group: Benefits/ Low Needs Cluster

Research Aim 2: Social Location and English as Second Language Predicting

Clusters of Needs. Multinomial logistic regression was conducted to assess the influence of Social Location and English as a Second Language as predictors of victims' cluster membership. White victims who graduated college or completed some higher education were the reference category for the independent variable, social location. The Benefits/Low Needs Cluster was the reference category for the dependent variable. The full model represented a statistically significant improvement in predicting victims' clusters of needs ($p=.00$) over the intercept (original) model, suggesting that the final model explains a significant amount of the variability in victims' cluster membership. Likelihood Ratio Tests in Table 8 below shows that English as a Second Language status (ESL), $\chi^2(4)= 22.55, p<.00.$, Black victims who graduated high school or completed some college, $\chi^2(4)= 12.78, p<.01.$, and Latina victims who graduated high school or completed some college, $\chi^2(4)= 12.34, p<.01$ had significant main effects on predicting victims' cluster membership in comparison to White victims who graduated college or completed higher education.

Table 8: Likelihood Ratio Tests from Multinomial Logistic Regression Examining ESL and Social Location Predicting Victims' Clusters of Needs Upon Entrance to Services

Effect	Model Fitting Criteria -2 Log Likelihood of Reduced Model	Likelihood Ratio Tests		
		Chi-Square	df	<i>p</i>
Intercept	156.56a	0	0	.
ESL	179.12	22.55	4	0.00
BlackNoHSGrad	164.36	7.80	4	0.10
BlackHSgradSomeCollege	169.34	12.78	4	0.01
BlackCollegeGradorMore	159.58	3.03	4	0.55
WhiteNoHSgrad	158.27	1.71	4	0.79
WhiteHSGradSomeCollege	159.62	3.06	4	0.55
LatinoNoHSGrad	157.53	0.97	4	0.91
LatinoHSGradSomeCollege	168.90	12.34	4	0.02
LatinoCollegeGradorMore	162.66	6.10	4	0.19

To see the specific effects of which predictors (ESL and Social Location) significantly predict the clusters of needs, we have to look at the individual parameter estimates (see Table 9 below). After controlling for social location, English as a second language significantly predicted victims' cluster membership in the High Needs vs. the Benefits/Low Needs, $b = -2.28$, Wald $\chi^2(4) = 5.85$, $p = .016$. The odds of ESL victims being in the High Needs cluster (rather than the Benefits/Low Needs cluster) is 9.71 times the odds of non-ESL victims.

After controlling for ESL status, Latina victims who graduated high school or completed some college significantly predicted victims' cluster membership in the High Needs vs.

Benefits/Low Needs, $b = -2.63$, Wald $\chi^2(4) = 5.41$, $p = .020$. The odds of Latina victims who graduated high school or completed some college being in the High Needs cluster (rather than the Benefits/Low Needs cluster) is 13.89 times the odds of White victims who graduated college or completed higher education.

After controlling for ESL status, Latina victims who graduated high school or completed some college also significantly predicted victims' cluster membership in the Economic Needs vs. Benefits/Low Needs, $b = -2.87$, Wald $\chi^2(4) = 6.42$, $p = .011$). In other words, the odds of Latina victims who graduated high school or completed some college being in the Economic Needs cluster (rather than Benefits/Low Needs cluster) is 17.54 times the odds of White victims who graduated college or completed higher education.

After controlling for ESL status, Latina victims who graduated high school or completed some college also significantly predicted whether victims' cluster membership in the Legal Needs vs. Benefits/Low Needs, $b = -2.87$, Wald $\chi^2(4) = 6.51$, $p = .011$. In other words, the odds of Latina victims who graduated high school or completed some college being in the Legal Needs cluster (rather than Benefits/Low Needs cluster) is 17.54 times the odds for White victims who graduated college or completed higher education.

After controlling for ESL status, Latina victims who graduated high school or completed some college also significantly predicted whether victims' cluster membership in the Mental Health Needs vs. Benefits/Low Needs, $b = -2.58$, Wald $\chi^2(4) = 5.60$, $p = .018$. In other words, the odds of Latina victims who graduated high school or completed some college being in the Mental Health Needs cluster (rather than Benefits/Low Needs cluster) is 13.16 times the odds than for White victims who graduated college or completed higher education.

Table 9: Parameter Estimates from Multinomial Logistic Regression of ESL and Social Location Predicting Victims' Clusters of Needs upon Entrance to Services

Cluster Name		B	S.E.	95% Confidence Interval			p
				Lower Bound	for B Odds Ratio	Upper Bound	
High Needs	Intercept	6.28	3.94				0.11
	ESL	-2.28	0.94	0.02	0.10	0.65	0.02
	BlackNoHSGrad	-0.19	1.48	0.05	0.83	15.13	0.90
	BlackHSgradSomeCollege	0.70	0.63	0.59	2.01	6.93	0.27
	BlackCollegeGradorMore	0.04	0.80	0.22	1.04	5.01	0.97
	WhiteNoHSgrad	-0.41	0.80	0.14	0.66	3.20	0.61
	WhiteHSGradSomeCollege	0.43	0.64	0.44	1.54	5.45	0.50
	LatinoNoHSGrad	-0.50	0.84	0.12	0.60	3.11	0.55
	LatinoHSGradSomeCollege	-2.63	1.13	0.01	0.07	0.66	0.02
	LatinoCollegeGradorMore	-1.63	1.17	0.02	0.20	1.95	0.16

Economic Needs	Intercept	8.89	3.89				0.02
	ESL	-0.68	0.99	0.07	0.51	3.51	0.49
	BlackNoHSGrad	-2.16	1.16	0.01	0.12	1.12	0.06
	BlackHSgradSomeCollege	-0.81	0.54	0.15	0.44	1.28	0.13
	BlackCollegeGradorMore	-0.68	0.73	0.12	0.51	2.10	0.35
	WhiteNoHSgrad	0.08	0.89	0.19	1.08	6.13	0.93
	WhiteHSGradSomeCollege	-0.21	0.60	0.25	0.81	2.61	0.72
	LatinoNoHSGrad	-0.57	0.87	0.10	0.57	3.13	0.51
	LatinoHSGradSomeCollege	-2.87	1.13	0.01	0.06	0.52	0.01
	LatinoCollegeGradorMore	-1.19	1.25	0.03	0.30	3.50	0.34
Legal Needs	Intercept	7.08	3.90				0.07
	ESL	-0.44	0.98	0.10	0.65	4.40	0.66
	BlackNoHSGrad	-0.10	1.48	0.05	0.90	16.44	0.95
	BlackHSgradSomeCollege	-0.26	0.55	0.26	0.77	2.25	0.63
	BlackCollegeGradorMore	-0.80	0.70	0.11	0.45	1.78	0.26
	WhiteNoHSgrad	0.19	0.88	0.22	1.21	6.76	0.83
	WhiteHSGradSomeCollege	-0.37	0.57	0.23	0.69	2.12	0.52

	LatinoNoHSGrad	-0.71	0.85	0.09	0.49	2.59	0.40
	LatinoHSGradSomeCollege	-2.87	1.12	0.01	0.06	0.52	0.01
	LatinoCollegeGradorMore	-1.83	1.17	0.02	0.16	1.60	0.12
Mental Health Needs	Intercept	3.76	3.47				0.28
	ESL	-0.90	0.95	0.06	0.41	2.60	0.34
	BlackNoHSGrad	-0.80	1.18	0.04	0.45	4.52	0.50
	BlackHSgradSomeCollege	0.78	0.52	0.78	2.17	6.03	0.14
	BlackCollegeGradorMore	-0.01	0.67	0.27	0.99	3.72	0.99
	WhiteNoHSgrad	0.58	0.80	0.37	1.79	8.60	0.47
	WhiteHSGradSomeCollege	0.37	0.53	0.52	1.45	4.11	0.48
	LatinoNoHSGrad	-0.28	0.79	0.16	0.76	3.58	0.73
	LatinoHSGradSomeCollege	-2.58	1.09	0.01	0.08	0.64	0.02
	LatinoCollegeGradorMore	-0.35	1.22	0.06	0.71	7.77	0.78

Note. The reference category for the dependent variable is the Benefits/Low Needs Cluster. The reference category for the independent variable (social location) is White victims who graduated college or completed higher education.

Research Aim 3: Social Location and English as Second Language Predicting

Outcomes. A series of 4 multiple OLS regressions were conducted to assess the influence of victims' social location and English as a Second Language status on victims' outcomes six months after receiving services (i.e., Coping DV, Financial Independence, Understanding DV, and Safety). Assumptions of normality and homoscedasticity were not met. Thus, bootstrapping was used to generate confidence intervals, and significance tests of the model parameters. Victims' social location were dummy coded and White victims who graduated college or completed higher education was defined as the reference group. Bivariate correlations of these variables are seen in Table 10, followed by multiple regression results for all four models (Table 11).

Table 10: Correlations for Regression Analyses with ESL and Social Location as Predictors of Domestic Violence Outcomes (Research Aim 3)

	1	2	3	4	5	6	7	8	9	10	11	12	13
1.ESL													
2. BlackNoHSGrad	-0.083												
3.BlackHSgradSomeCollege	-.229**	-0.086											
4. BlackCollegeGradorMore	-.136**	-0.051	-.141**										
5. WhiteNoHSgrad	-.097*	-0.036	-.101*	-0.060									
6.WhiteHSGradSomeCollege	-.191**	-0.072	-.198**	-.118*	-0.084								
7.WhiteCollegeGradorMore	-.128**	-0.056	-.154**	-.091*	-0.065	-.128**							
8.LatinoNoHSGrad	.530**	-0.072	-.200**	-.119*	-0.085	-.167**	-.130**						
9.LatinoHSGradSomeCollege	.189**	-0.086	-.237**	-.141**	-.101*	-.198**	-.154**	-.200**					
10.LatinoCollegeGradorMore	.111*	-0.039	-.109*	-0.065	-0.046	-0.091	-0.070	-.092*	-.109*				
11.CopingDV	.112*	-0.023	-0.027	-0.041	0.011	0.007	-.123**	0.088	0.059	0.035			
12.FinancialIndependence	0.082	-0.010	0.013	0.043	-.110*	0.012	-0.070	0.090	0.035	-0.006	.425**		
13.UnderstandingDV	0.044	-0.016	-.112*	-0.078	-0.042	0.047	-0.005	0.069	0.069	0.060	.522**	.222**	
14.Safety	0.004	0.036	-0.032	-0.057	0.031	0.090	-0.075	-0.001	-0.003	0.014	.492**	.324**	.283**

** $p < .01$; * $p < .05$

Table 11: Multiple Regression Results Examining ESL and Social Location as Predictors of Victims' Outcomes Six Months After Beginning Services

		b (95% bootstrapped confidence intervals)	SE (B)	β	<i>t</i>	<i>p</i>
Model 1:						
Coping with DV (n=460)	(Constant)	1.59 (1.50, 1.67)	0.05		35.47	0.00
	ESL	0.06 (-0.04, 0.15)	0.05	0.07	1.09	0.23
	BlackNoHSGrad	0.07 (-0.14, 0.28)	0.10	0.04	0.72	0.48
	BlackHSgradSomeCollege	0.10 (-0.03, 0.21)	0.06	0.11	1.69	0.10
	BlackCollegeGradorMore	0.07 (-0.09, 0.22)	0.08	0.05	0.94	0.38
	WhiteNoHSgrad	0.13 (-0.07, 0.33)	0.10	0.08	1.49	0.18
	WhiteHSGradSomeCollege	0.12 (0.00, 0.25)	0.06	0.13	1.98	0.07
	LatinoNoHSGrad	0.14 (0.01, 0.27)	0.07	0.14	1.94	0.03
	LatinoHSGradSomeCollege	0.13 (0.01, 0.25)	0.06	0.15	2.18	0.03
	LatinoCollegeGradorMore	0.15 (-0.01, 0.28)	0.08	0.09	1.69	0.05
Model 2: Financial Independence (n=451)						
	(Constant)	1.15 (0.96, 1.33)	0.10		13.78	0.00
	ESL	0.06 (-0.12, 0.25)	0.09	0.04	0.58	0.52
	BlackNoHSGrad	0.19	0.18	0.05	1.04	0.28

		(-0.15, 0.56)				
	BlackHSgradSomeCollege	0.24	0.11	0.16	2.29	0.03
		(0.04, 0.47)				
	BlackCollegeGradorMore	0.32	0.15	0.14	2.36	0.04
		(0.03, 0.62)				
	WhiteNoHSgrad	-0.10	0.20	-0.03	-0.61	0.63
		(-0.53, 0.29)				
	WhiteHSGradSomeCollege	0.25	0.12	0.14	2.16	0.04
		(0.02, 0.49)				
	LatinoNoHSGrad	0.32	0.14	0.18	2.39	0.02
		(0.07, 0.58)				
	LatinoHSGradSomeCollege	0.25	0.12	0.16	2.23	0.03
		(0.03, 0.48)				
	LatinoCollegeGradorMore	0.19	0.18	0.07	1.19	0.28
		(-0.16, 0.54)				
Model 3: Understanding DV (n=459)	(Constant)	1.83	0.05		37.06	0.00
		(1.73, 1.92)				
	ESL	-0.06	0.05	-0.06	-0.96	0.27
		(-0.16, 0.04)				
	BlackNoHSGrad	-0.03	0.10	-0.02	-0.29	0.75
		(-0.25, 0.16)				
	BlackHSgradSomeCollege	-0.08	0.07	-0.09	-1.33	0.24
		(-0.23, 0.06)				
	BlackCollegeGradorMore	-0.10	0.09	-0.07	-1.26	0.24
		(-0.28, 0.07)				
	WhiteNoHSgrad	-0.08	0.13	-0.04	-0.76	0.59
		(-0.36, 0.14)				
	WhiteHSGradSomeCollege	0.04	0.06	0.04	0.66	0.46
		(-0.07, 0.16)				
	LatinoNoHSGrad	0.11	0.07	0.10	1.39	0.11
		(-0.03, 0.25)				
	LatinoHSGradSomeCollege	0.07	0.06	0.07	1.05	0.25

Model 4: Safety (n=454)	LatinoCollegeGradorMore	(-0.05, 0.18) 0.12 (-0.03, 0.28)	0.08	0.07	1.29	0.11
	(Constant)	1.74 (1.63, 1.84)	0.05		33.20	0.00
	ESL	0.01 (-0.10, 0.12)	0.06	0.01	0.16	0.84
	BlackNoHSGrad	0.14 (-0.09, 0.32)	0.10	0.06	1.22	0.15
	BlackHSgradSomeCollege	0.04 (-0.10, 0.17)	0.07	0.04	0.57	0.58
	BlackCollegeGradorMore	-0.02 (-0.18, 0.16)	0.09	-0.01	-0.18	0.85
	WhiteNoHSgrad	0.12 (-0.06, 0.29)	0.08	0.06	1.17	0.14
	WhiteHSGradSomeCollege	0.15 (0.03, 0.27)	0.06	0.14	2.09	0.01
	LatinoNoHSGrad	0.05 (-0.10, 0.19)	0.07	0.05	0.64	0.47
	LatinoHSGradSomeCollege	0.05 (-0.11, 0.19)	0.08	0.05	0.74	0.49
	LatinoCollegeGradorMore	0.08 (-0.10, 0.24)	0.09	0.05	0.84	0.35

Note: Results are based on 1000 bootstrap samples. The reference category for the independent variable (i.e., social location) is White victims who graduated college or completed higher education.

After controlling for ESL status, findings suggest compared to White victims who graduated college or completed higher education, Latina victims who did not graduate high school, $b = .140$ [.013, .266], $p = .029$, and Latina victims who graduated high school or completed some college, $b = .131$ [.012, .253], $p = .030$, had higher outcomes on Coping with Domestic Violence.

After controlling for ESL status, findings suggest compared to White victims who graduated college or completed higher education, Black victims who graduated high school or completed some college $b = .244$ [.036, .470], $p = .027$, Black victims who graduated college or completed higher education, $b = .322$ [.025, .620], $p = .035$, White victims who graduated high school or completed some college $b = .245$ [.017, .494], $p = .044$, Latina victims who did not graduate high school $b = .318$ [.066, .584], $p = .016$, and Latina victims who graduated high school or completed some college $b = .248$ [.034, .482], $p = .033$, had higher outcomes on gains in Financial Independence.

No significant effects were found for the Understanding Domestic Violence Outcome. Finally, after controlling for ESL status, findings suggest compared to White victims who graduated college or completed higher education, White victims who graduated high school or completed some college, $b = .149$ [.033, .272], $p = .013$ had higher Safety Outcomes.

Discussion

The present study used cluster analysis to examine profiles of victims' needs upon entrance to services. Compared to Allen and colleagues' (2004) study of clusters of victims' needs six months after completing services, the current study found some differences and some consistencies. Both Allen et al. (2004) and our study indicated clusters of low and high needs. However, in the current study, victims with ESL status (English as a Second Language) occupied

a majority of the high needs profile, creating the High Needs cluster. The low needs profile was also associated with being likely to need benefits, creating the Benefits/Low Needs cluster. Our study demonstrated a consistent finding that Legal Needs continues to be a major cluster profile among victims, whether that profile is identified at the start of services, or six months after completing services (i.e., Allen et al., 2004). A cluster representing housing needs was identified by Allen and colleagues (2004); however, this was not an identifying feature of any of the clusters in the current study. Instead, the current study found clusters focused on mental health needs and economic needs. This difference in clusters profiles may have been influenced by the time victims' needs were assessed (upon entrance to the study, as in the current study vs. six months after beginning services, as in the Allen et al., 2004 study). Furthermore, in the current study, victims were accessing services across numerous domestic violence program settings (e.g. shelter, counseling, court advocacy, and legal services) compared to the study by Allen and colleagues (2004), which examined needs after victims had only left shelter services. The economic needs cluster partially resembles the employment and education cluster identified in the previous study. However, it is noteworthy the economic needs cluster in the present study also encompassed a focus on financial literacy. This has been a more prominent topic among IPV service providers in recent years, with programs providing financial literacy services in hopes of helping victims increase safety and maintain independence from their abusers (Postmus et al., 2012).

Research Aim 1: Clusters of Needs Predicting Outcomes

In this study, belonging to the Legal needs cluster at the time of starting services predicted higher safety outcomes of victims six months later than victims in the Benefits/Low Needs cluster. Higher safety outcomes for victims of Legal Needs cluster may be explained by

how providers are addressing victims' needs. Victims who endorsed legal needs, may have received more legal services (such as legal advocacy to get an order of protection or going to court with an advocate). These victims may have also received support from providers related to their immigration status, divorce, child custody, and visitation –all of which are structural ways the legal system may help create safe spaces between a victim and her abuser, and heighten her perception of safety (Dill, 2011). In this way, these legal services may have helped victims in the Legal Needs cluster make greater gains in safety. An alternate explanation for higher safety outcomes for victims of Legal Needs cluster may be that victims that endorsed legal needs had more safety issues to begin with and therefore improved more on safety than other victims.

Research Aim 2: Social Location and ESL Predicting Clusters of Needs.

Our findings extend beyond Allen and colleagues (2004) study by examining victims' needs within a more diverse sample of victims, and by examining differences in diverse victims' need profiles. Specifically, in the present study, social location (interaction between race and SES) and English as a Second Language predicted victims' need cluster membership. These results support and build upon Crenshaw's (1991) theory of intersectional identity, which she argued shapes diverse women's experiences of IPV. While Crenshaw focused on the intersection of gender and race, she acknowledged other sociocultural dimensions of an individual (e.g. class, sexuality) may influence their experiences of IPV. The theory suggests IPV victims' experiences in society are impacted by their intersectional identities (social location) and thus their needs in response to those experiences may also vary. We expanded on Crenshaw's theory of intersectional identity to examine whether the interaction between race and SES (i.e., education; social location) of diverse IPV victims impacts their needs. In the current study, we did not find clear, consistent effects of race, or SES on needs, but instead it was specific intersections of race

and SES (i.e., education; social location) that were associated with cluster membership. These results are consistent with Crenshaw's theory that intersections of individuals' identities should be examined.

Previous researchers have compared differences in needs of IPV victims based on race/ethnicity and education *separately*, but not examined the interaction of those constructs (Lyon et al., 2008). For example, Lyon and colleagues (2008), found that Black victims wanted more help with various needs compared to White and Hispanic victims. On the other hand, in the current study, victims who spoke English as a second language were ten times more likely to belong to a High Needs Cluster profile compared to victims who spoke English as a first language. In addition, Latina victims who graduated high school and completed some college were 13 to 17 times more likely to belong to a High Needs Cluster profile, Economic Needs Cluster profile, Legal Needs Cluster profile, and Mental Health Cluster profile compared to White victims who graduated college or completed higher education. Significant differences in the odds of victims' cluster memberships among Latina victims with high school education compared to White victims with college education makes understanding the impact of social location (intersection of race *and* education) that much more important.

As identified by Kennedy and colleagues (2012) relating to the help-attainment process, numerous contextual factors (e.g., community, developmental and situational) can play a role in impacting the differences in profile needs of Latina victims with high school education compared to White victims with college or higher education. Keeping in mind contextual factors, we can expect Latina victims experience systemic discrimination far more frequently than their white female counterparts, which may impact their economic and legal needs. For instance, a Latina high school graduate may be discriminated against when it comes to obtaining a job because of

her immigration status, and in turn that will affect how many more economic and legal needs she has compared to a White college graduate who has accessibility to more jobs, does not struggle with immigration issues, and in turn acquires less economic and legal needs.

In addition to understanding significant differences between Latina victims with high school education and White victims with college education, it is critical to explore why Latina victims in other education groups (i.e., no high school, or college education or higher) did not show significant differences in needs compared to White victims with college education or higher. Significant effects may not have been found for Latinas in these groups due to small cell sizes. Specifically, Latina women with college education or higher were only 5% of the sample (n=22). Furthermore, among Latina victims with no high school education, only 40% (n=19) of the women in this social location group did not speak English as a second language. Thus, it may have made it difficult to view the effects of this group on victims' needs after controlling for ESL.

Furthermore, we did not find any effects for any Black victims and the specific need profiles we compared in the current study. These differences may be due to examining the interaction of race and education (i.e. social location) in small groups and thus resulting in nonsignificant effects compared to the reference category. An alternative explanation may be that Lyon and colleagues (2008) examined victims' needs only in shelter settings, while the current study examined services in agencies with shelter and non-shelter services. The differences in agency type (e.g. shelter, shelter plus, non-shelter) may have impacted the types of needs black victims endorsed in the previous study compared to the present study, leading to nonsignificant effects.

Research Aim 3: Social location and ESL Predicting Outcomes.

In the final aim, social location predicted victims' outcomes. Building upon Kennedy and colleagues' (2012) model, which suggests social location of victims can affect the mental health outcomes of victims through the help-seeking and help-attaining process, we believed other types of outcomes would also be impacted. We explored these other outcomes in the current study (e.g., Financial Independence, Safety). Surprisingly, across outcomes, marginalized groups of women we expected to do worse (minority/lower SES women), tended to do better than our reference category (White college graduates or those who completed higher education). Latina victims with no high school education or high school graduates had significantly higher outcomes for Coping with Domestic Violence than White college graduate victims. One possible explanation is that Latina victims may begin with less knowledge of the specific coping domains that were measured in the present study compared to White victims upon their entry to services, which may lead to reporting greater improvement on Coping with Domestic Violence. For example, if a Latina victim primarily speaks Spanish or is an immigrant, she may have had less knowledge of her legal rights before seeking services in comparison to a White victim who has grown up in the US (ref. subscale item of Coping with Domestic Violence, "I understand my legal rights as a domestic violence victim.")

In addition, we identified Black, White, and Latina victims who graduated high school or completed some college reported significantly higher outcomes for Financial Independence compared to White college graduate victims. Furthermore, Latina victims with no high school education and Black victims with college or higher education reported significantly higher outcomes for Financial Independence compared to White college graduate victims. These findings may be explained by the greater room for opportunity minority and lower SES women have to improve upon their financial outcomes compared to nonminority, higher SES women.

Moreover, White high school graduates have had higher Safety outcomes compared to White college graduate victims. This result may be related to White high school graduates' greater room for opportunity to improve upon their Safety outcomes compared to White, higher SES women. As former researchers have noted, economic security may increase victims' sense of safety (Ditcher & Rhodes, 2011). Therefore, women with higher SES may have less room to improve on this outcome.

The findings above are important in relationship to calls for more culturally-responsive IPV services for minority women (e.g. Taft, Bryant-Davis, Woodward, Tillman & Torres, 2009). An encouraging explanation of these findings may be that the services provided through these fifteen domestic violence agencies are culturally-responsive, and successfully meeting the needs of minority and lower SES victims. The Centralized Training Institute (CTI) of the Chicago Metropolitan Battered Women's Network was created in an effort to form systematic, high quality training opportunities for advocates and other professionals in Cook County in 1997. Since its inception, the members of the CTI have intentionally addressed issues of diversity and equal access because of the diverse membership of the network. For instance, relevant trainings are presented in English, Spanish, and American Sign Language. Diverse network members have influenced the training of professionals in the Chicago area to be culturally sensitive when serving diverse victims, which in turn may have positively impacted diverse victims' outcomes in this study.

Limitations and Future Directions

A limitation of the present study was our inability to capture male or LGBTQ victims' needs and outcomes. Another limitation of the study, was the focus on White, Black, and Latina victims, and not on other races or multiracial victims. Male and LGBTQ victims and victims of

multiracial or other racial/ethnic backgrounds may have different needs and outcomes, and therefore should be studied in the future. Although we did attempt to account for victims who may be immigrants by examining the ESL status of victims, it will be imperative in the future to examine immigration status directly, and to look at differences in needs and outcomes among other racial/ethnic groups and victims who are foreign-born, and predominantly non-English speaking. In the future, researchers can assess profiles of victims' needs and differences in outcomes for immigrant and refugee victims.

Another limitation of the study was the design of the survey for examining victims' needs upon entrance to services. While these needs were fortunately captured, they were reported by the victims six months after beginning services. This means they had to retrospectively share their responses. Reporting their needs six months after they began services may cause recall bias, a form of information bias. The recall of information depends on the memory of participants, which can be imperfect. By using self-reported data, participants may report in a manner that is different than how they were feeling at the time of starting services. Additionally, the specific section of this questionnaire asked victims to check yes if they needed a service, which made researchers have to assume they did not need a service if they did not check a box for a specific need. In the future, to reduce recall bias and improve the instrument used, it may be helpful to complete a pre and post survey of their needs and/or complete qualitative interviews to better understand what victims need and do not need help with before and after receiving services.

Finally, in the present study, while we examined diverse victims' needs and outcomes, we did not capture their subjective experiences of receiving services and addressing needs. Our results may indicate that domestic violence programs are doing well at helping minority, lower SES women improve on the specific outcomes that we measured, but it is possible that there are

still gaps in how we help minority, low SES women. In the future, we need to also assess women's subjective experiences of receiving help.

Implications for Policy and Practice

IPV services were created with the intention of meeting victims' needs. Most programs will examine victims' needs after they have received services to see what is missing (Allen et al., 2004) from the services that were provided, but there might be benefit in examining their needs at the start of services, to improve how victims are served earlier in the process (as we did in the present study). Additionally, identifying clusters of needs demonstrated an enriching way to approach serving victims' needs upon their entry to services. Service providers should be aware of the forms of need profiles victims enter services with, and use that to help them become more effective at providing services. Based on our five clusters, for example, if we know that victims have high needs across the board, then they may also not speak English as their primary language, and require additional support around navigating the agency and other systems in the community (i.e., member of High Needs Cluster).

Based on the High Needs Cluster identified and the significant differences in clusters of needs based on ESL status of victims found in the current study, funders and service providers should consider how important it is for victims to have access to interpreters and improve capacity for primarily non-English speaking victims to enter and receive services. Victims of immigrant backgrounds whose primary language is not English historically report high needs across the board, further suggesting the necessity for holistic sets of services for ESL victims entering agencies.

Our results showed that higher endorsement of the Legal Needs cluster was associated with greater improvement in safety outcomes. However, it is also important that service

providers share their knowledge of legal services with all victims whether they endorse needing those services or not. Some victims may feel uncomfortable with or fear accessing legal remedies related to the abuse and therefore do not endorse these needs when they start seeking help (e.g. fear of deportation, separation from children; Dutton et al., 2000). This is commonly noted in the literature among immigrant victims' experiences. It may be helpful for providers to share with all clients that learning more about their legal rights and legal services may help them feel safer in the future, even if victims do not initially state that they need those services.

Finally, the current study suggests researchers and service providers have to be more understanding of the intersectional identities. Social location (interaction of race and SES) of victims clearly is related to cluster membership of needs. In turn, providers must be sensitive to the intersectional identities of victims as they seek help to address their needs from domestic violence programs. Social location of victims also significantly related to their outcomes after receiving services; however, not in the way we expected. Minority, lower SES women improved more compared to nonminority, higher SES women, which may be due to a number of reasons. Researchers and providers should consider how victims' outcomes are defined, and whether outcomes should be tested in other ways, such as, overall well-being. If a minority, lower SES victim reported higher outcomes for Financial Independence compared to a nonminority, higher SES victim upon completion of services, her overall well-being may still be less than the nonminority victim's well-being. These are factors that needs to be more thoroughly explored by using multiple instruments to collect information from victims about their outcomes after completing services, and overall aspects of their well-being. It may be useful to assess the differences in victims' needs after they have received services for six months, to identify which needs have or have not been met with the support of a service agency. In-depth interviews with

victims' may also help expand on their perceptions of outcomes and overall well-being without being limited to the subjects of any single questionnaire.

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